TEXTILE TECHNOLOGY DIGEST

AUTHOR INDEX

January-December 1988

INSTITUTE OF TEXTILE TECHNOLOGY
CHARLOTTESVILLE, VIRGINIA

© Copyright 1989 by the Institute of Textile Technology. May not be reproduced without written permission.

The TEXTILE TECHNOLOGY DIGEST is published monthly by the Institute of Textile Technology, P. O. Box 391, Charlottesville, Virginia 22902, to provide abstract coverage of current periodicals, and books in the field of textile technology. In preparing this manual index the staff endeavors to reflect correctly the contents of the original material. Annual subscription: $330.00.

Abbas E. M. 4467
Abbas M. S. 1789 5066 5069
Abbot D. 4527
Abdel-Bary E. M. 7311
Abdel-Hafiz S. A. 2223 8553
Abdel-Malek L. 1408
Abdulkhakova Z. Z. 7913
Abdullaeva M. I. 8010
Abegglen H. 3712 6983
Abend J. 1548 5370
Abhiraman A. S. 4046 8015 8017 8025
Ablayeva G. P. 4277
Abo-Shosha M. H. 6901 6929
Aboshi H. 7843
Abou-Shousha M. H. 8543
Abou-Zeid N. Y. 5152
Abramov I. 6294
Abrokov F. A. 6157
Abusamra L. 2975
Acar M. 4961 5808 6606 8201
Acharya S. D. 8388
Achermann A. 5892
Achwal W. B. 5161 6536 7558
Acker V. C. 8447 8448 8745
Adams D. F. 658 2635 7504 8711
Adams G. C. 7243
Adams K. L. 1454
Adams S. 1742
Adler U. 3898
Adrion R. 4452
Afanas'yev Yu. A. 4198
Afanasyeva G. V. 4483
Afasizhev N. D. 7333
Afzal I. 7987
Agafonova L. L. 95 3565
Agarwal N. K. 8830
Agarwal R. C. 2427
Aggarwal S. K. 173 1014 3826 6569 8271
Agnihotri V. G. 6110 6820 7555
Agnihotri V. K. 8960
Agoos A. 8789
Agoshkov L. A. 599
Agota A. 555
Agrawal A. K. 6569
Aguiar P. R. 7773
Ahluwalia H. 1240 4475
Ahmad J. 3635
Ahmad N. 8434
Ahmed M. 5453
Ahrendt D. 4921 5807 8174 8175
Ahrens D. 3788
Ahtinen L. 364
Ahuja G. 7595
Aikele M. 3470 3471
Ainsworth S. J. 7005
Ainsworth W. D. 7804
Aisaka N. 7073
Aizenshtein E. M. 83
Ajgaonkar D. B. 3448 6638
Ajgaonkar S. B. 6849
Ajibade F. 4327 6719
Akagawa N. 1896 6806
Akami H. 7073 7074
Akao Y. 8515
Akasaka N. 5289
Akasaka T. 4319
Akay M. 8364
Akbarov D. N. 4893 5557 7360
Akers P. J. 865 5644
Akhtar S. 6378
Akilova Z. T. 5337
Akiyama R. 914 2701 5464
Akiyama S. 444
Akkapeddi M. K. 3840
Akkara J. A. 7710
Akramov B. N. 5043
Aksay I. A. 8055
Alaiban T. S. 2682 3538 5460 5907
Alam M. Z. 1695
Alberghina G. 418 5218 8481
Albers E.-A. 8052
Albertsson A.-C. 3304
Albonico F. 8442
Albrecht A. 5680
Albrecht P. 2711
Albrecht W. 349 1891 2391 3278
Aldamuy L. 1411 2257 3019
Aleksandrov V. P. 5498
Alekseenko N. P. 3391 5131
Alekseyeva G. S. 4117
Alekseyeva T. N. 5308
Aleksic R. 7307
Aleksov V. 5723
Aleshina N. F. 4192
Alexander B. 7167
Alexander J. R. 4315
Alexandrov B. 7637
Alger K. A. 6936
Alger K. W. 3058
Ali A. K. M. M. 1803
Alimov Kh. A. 494
Allahwala A. 2744
Allaire R. A. 8375
Allan A. E. 7734
Allan M. T. 5103
Allen A. 2823
Allen D. H. 6311
Allen E. 2108 2140 2142 3843
Allen H. A. 380
Allen N. S. 3638
Allen S. R. 6264
Allred R. E. 8026
Almeida L. G. 3957
Aloi M. 4466
Alon G. 5605
Alpar B. 3253 8822
Alsiban T. S. 6612
Alston P. V. 951
Altenhofen U. 4488 8393
Alter-Pesotsky F. L. 5217
Alterman A. 3912
Altham T. 1492
Altieri J. M. 526
Altstaedt V. 7310
Altynova A. L. 4104
Amateau M. F. 4325
Amato M. E. 3593 8481
Ambroise P. 3150
Ambros J. 5662
Ameling B. 495 5321
Amin K. E. 1078
Amorim M. T. 3957
Amsler P. 7786
Anand S. C. 1170 1171
Ananthan T. V. 5511
Ananthapadmanabhiah K. V. 6568
Ananthaswamy D. R. 8190
Anasiewicz S. M. 8360
Andermahr H. 3701 3702 3703 4528
Anders H.-J. 3981
Anderson A. 7399
Anderson C. 5024
Anderson C. G. 7220
Anderson J. A. 3882
Anderson J. E. 6364
Anderson T. 2079 5393
Ando F. 7811
Ando Y. 2770 6916
Andra G. 1920
Andrasik I. 574 3739 4571 6205
Andrasik M. 2053 2065 5132 7006
Andreeva I. N. 3967 4918
Andreeva L. T. 3811 4895
Andrew C. 4579
Andrews B. A. K. 382 1185 6143 7089 7640
Andrews M. G. 7969
Andrianarisoa -. 2500
Andrianov V. S. 5371
Andrianova G. P. 4500 5316
Andrianova L. N. 3257 3655
Andrienko P. P. 5123 6025 6797
Andronova A. P. 3266 8106
Androsov V. F. 4371
Androsova T. B. 4965
Andrushkevich V. V. 4250
Angel M. 287
Angelescu A. 3965
Angelini P. J. 5983
Angelmahr H. 493
Anishchuk Ye. N. 5166
Anisimov V. M. 5266
Anisimova O. M. 5266
Anisina N. G. 3296
Anjaria M. K. 6060
Anliker R. 7194
Annen O. 442 3623
Anokhin V. V. 6157
Anqiu Z. 5650 7357
Anson R. 2384 8955
Anthony W. S. 2407 6439 6441 6444 8001
Antill D. 348
Antipov E. M. 5098 8023
Antipov V. S. 113
Antohi I. 3336
Antonova I. M. 338
Antonova L. F. 4052 5143
Antonova V. V. 4275
Aoki A. 1618
Aoki K. 6509
Aoki T. 8365
Aoki Y. 1449
Apokin Ts. V. 5468
Apolloni E. 8216
Arai M. 1622 6942
Araki T. 2654
Arashi M. 5274
Araujo M. 5138
Aref'eva M. M. 3264
Arkhipov A. S. 5095
Arkhipov G. S. 6157
Arkhipov O. A. 8737
Arman J. 6384
Armistead J. P. 1046
Armstrong R. A. 1272 1569 2150 2377 3109
Arnold G. S. 7359
Arnold J. 2043
Arnold R. 3535 3551
Aro J. 364
Aronikov A. M. 4087
Arora E. 6369
Artem'yeva Z. K. 4461 5210
Artemenko B. F. 5025
Artemova T. A. 4355
Arthur D. F. 2296
Artig-Swomley G. 1200 6036 6262
Artyukh N. A. 170
Artzt P. 4078 5451 5765 6577
Arzhakova T. I. 4439
Asai K. 6386
Asakura M. 6942
Asakura T. 24 6539
Aschner G. 731 7848
Ashbee E. 7495
Ashbee K. H. G. 7495
Ashizaki T. 140
Ashkenazi B. 6532 7650 7884
Ashkenazi B. S. 435 1179 1217 1225 1973 1983 4435 4438 6822 7634 8499 8719
Ashmore N. 2063
Ashmore N. J. 5423
Ashton M. 3013
Aslanov Kh. A. 4164
Aspland J. R. 681 694 3849 7579
Astin K. B. 3635
Aston R. 331
Aswani K. T. 1717 3417 6667
Au-Yong K. 2948
Aubry E. 6589
Audivert R. 1710 5553
Aujogue B. 4635
Austin C. 1406
Austin W. R. 7100
Autonell J. C. 2551
Avdyunina Z. P. 5228
Avena A. 7511
Averbeck L. 495 5321
Averous M. 2500
Avram D. 3343
Avram M. 3343
Avril M. 6152
Avrorova L. V. 4858
Avseev Ye. G. 6356
Aykol N. 2290
Azarkin N. M. 4730
Azaroff L. V. 7349
Azarov V. A. 5200
Azarschab M. 4213 6661
Baba K. 8227
Babich I. I. 7913
Babushkina N. B. 4080 4117
Bachmann H. 5777
Bachmann H. H. 4929
Backe E. E. 3204 3205 3206 6440
Backmann R. 3340 3508
Badawy S. S. 1943
Bader N. J. 1430
Badertscher W. 1952
Badin J. S. 7180
Bae K. S. 474
Baecker E.-R. 2141 2143
Baeckmann R. 4726 6191 8604 8774
Baether W. 3859
Bagin V. K. 3392
Bagot B. 13 824 1275 1305 1556 1731 2248 2651 3067 3242 4814 5607 5610 6019 6049 6408 7839
Bagucki-Land B. 8247
Bahadori A. 1507
Bahners T. 4754 7176 8906 8909
Baichun J. 134
Bailey C. 694
Bailey K. 6208
Bailey T. 7263
Baily M. N. 8923
Baitinger W. F. 2077
Baixauli J. J. 7296
Baixiang Z. 657
Bajaj P. 42 1262
Bajenaru D. 3566
Baker J. E. 8794
Baker R. V. 6434 6441 6449

7272 7273
Bakker P. G. H. 7204
Baksheev I. P. 52 8031
Baksheyeva M. S. 5198 5298
Balabanov V. P. 4840
Balakirev V. A. 5334
Balakrishna K. 7471
Balalayev G. S. 5523
Balasubramaniam A. S. 6772
Balasubramanian G. 1771 5870
Balasubramanian M. 8015 8025
Balasubramanian N. 3335 5791 6566 6727 8143 8153
Balasubramanian P. 8154
Balasubramanya R. H. 3219 3929 3930 3931
Balau I. 8533
Balau T. 8533
Balcerzyk E. 5512
Balchen A. S. 1590 6035 8920 8929
Balk H. 4276
Balla J. 2273
Ballard M. 4823 7283
Ballhausen U. 2594
Ballistreri A. 906
Balmes J. 8892
Balov V. N. 5550
Balovina A. A. 147
Baloyan G. D. 3878
Baltayan O. D. 187
Balu N. 7927
Balyasov V. V. 6731
Bamji F. T. 8492
Banasiak L. 8590
Banbaji J. 7803 7810
Banduryan S. I. 4883
Bandyopadhyay B. N. 3631 6727 6935 7199
Bandyopadhyay S. K. 334
Banerjee A. N. 49
Banerjee P. K. 2682 3538 5460 5906 5907 6612
Bangdiwala M. R. 8958
Bank L. C. 7509
Banks M. A. 8869
Bannister-Parks M. 7768
Bannon L. 2347 2590 4851 5504
Banyard R. 2338
Baojun Q. 5650 7357
Baoqiun F. 19
Bapna D. L. 975
Bar-Yecheskel H. 5178 5605
Barabash N. D. 8913
Baranova A. A. 4927
Baranova G. S. 1242
Baranova T. M. 3265
Baranwal S. B. 635
Barash A. N. 3247 8042
Barashkov N. N. 7341
Barbery J. 475
Barclay J. 8904
Bardavelidze A. Sh. 5000
Barella A. 837 950 970 1291 1719 2513 3046 3353 3387 3389 4931 4944 6502 6503 6582 7065
Bargeron J. D. 6454
Barghash V. A. 1012
Barker B. 2886
Barker G. L. 6434
Barker R. L. 1012 2859 6060 6076 8707
Barko V. G. 5542
Barlowe R. G. 6459
Barnard T. D. 4875
Barnard W. 1113
Barnard W. S. 4291 6075
Barnes E. 6033
Barni E. 3629 6112 6911
Barnik Z. T. 3459
Baroonian A. 3514
Barr B. 8738
Barr E. 2895 2913 2928
Barr J. S. 4813
Barr R. 791 6000
Barry M. E. 1278 2151
Barsova L. I. 8029
Bartesaghi G. 7196
Bartl A.-M. 3551
Bartnik B. 1031 2598
Bartnik Z. T. 2596 5045 5081 5084 7438
Bartos K. 4878 4888
Bartoszkie T. 4732
Bascom W. D. 1046 7320
Bashmetov V. S. 7166
Basilchenko L. F. 111
Basin L. A. 4163
Basinger T. L. 5611
Baskin Z. L. 7913
Basok M. O. 8061
Bassett D. M. 6447
Bassing D. 7198
Basu A. K. 3210 3212 3222
Basu S. K. 7383
Batalko T. P. 213
Batchelder D. N. 6310
Batereau C. 7091
Bates P. J. 8864
Bateup B. O. 4010 8462
Bathie L. A. 4933
Bathurst R. J. 7783
Batik'yan B. A. 4882
Batmanova G. D. 273
Batra S. K. 4284 6020
Batson W. E. Jr. 8897
Battersby G. J. 5344
Bauchau O. A. 6314
Baudarbekov Ye. S. 6757
Baudonnel J. 352
Bauer A. 8100
Bauer G. 5637
Bauer K. 3386
Bauer W. 4695
Baughman G. L. 3142 7908
Bauhofer R. 4712
Baulina T. A. 4882
Baumann H. 3658
Baumann M. 3525
Baumgarten W. 2275
Baumgarter U. 3636
Bavrilov Ye. B. 4198
Baxley R. V. 8762
Bayazeed A. 6142 6873 7589
Bayer H.-G. 2828
Bayeva T. L. 5163
Bayha T. D. 6013
Bayor L. 7662
Beach S. 623
Beauchemin A. 2130
Beauernfeind U. 8802
Beaulieu R. J. 4723
Becht G. 3855
Bechtold T. 7103
Beck D. 7831
Beck G. J. 8858
Beck K. R. 676 2793
Becker E. 3621 4451 4458
Becker M. A. 7282
Becker R. 2277
Beckmann W. 7614
Beckwith G. H. 7788
Bedder P. 1017
Beder N. M. 63 4829
Bednarchuk N. S. 315 5119 6026
Bednarczyk P. J. 7509
Beecher J. 7667
Beever W. H. 980
Beg M. A. A. 1614
Begovatova S. Ya. 4385
Behera B. K. 6640
Behr L. H. 7787
Behrens W. W. 6543
Beicong M. 142
Beidl H. 5271
Beier R. C. 8865
Beijer L. 8894
Beketov A. I. 734
Bekker V. I. 14
Belasheva T. P. 8029
Belikov V. A. 215
Belkin A. I. 425
Belkina G. I. 4248
Bell A. A. 8856
Bell D. 3715 4538
Bell P. J. M. 3342
Bell S. J. 7607
Bell T. R. 3978
Bell V. 2775 7633
Bellamy C. 694
Bellaton R. 7977
Bellhouse E. 6466
Belogolovsky A. M. 275 5518
Belousov S. I. 5098 8023
Belousov Yu. Ya. 3967
Belov B. I. 6938
Belova G. V. 425
Belozerova Ye. A. 4981
Beltrame P. L. 6324
Belyayev G. V. 5497
Belyayeva S. A. 5470
Belyi A. V. 8172
Belyugov M. I. 5220
Benatan D. 3557
Benbow A. 2431
Bencze F. 3872
Bendak A. 4061
Bendt M. 4578
Benerito R. R. 7645
Beninate J. V. 479 4495 7590
Benisek L. 2438 8734
Bennett -. 438
Bennett D. S. 5667
Bennett M. 7053
Benning K. M. 1591 4757 5350
Bensel C. K. 7731
Benson S. D. 5623 7402
Benz F. F. 1786
Bepna D. L. 4016
Bercovici R. 488
Berenpas E. 1042
Beretta S. 7597
Berezin L. N. 237
Bereznenko N. P. 5360
Berg B. 4519
Berg J. 4651
Berg N. 8770
Bergado D. T. 6772
Berger J. 2350
Berger W. 3298
Berglund L. A. 1828
Bergmann L. 1098
Bergun V. P. 307
Berkman M. F. 494
Berlin A. A. 322
Bernal F. 1988 6605
Bernard H. 7024
Berne B. B. 1094 1368 2181 2939
Bernhardt S. 1161 3501
Berni R. J. 7992 8855
Berns R. S. 1197
Bernstein I. F. 796
Berreth S. P. 7824
Bershev Ye. N. 4272 5329
Bertea A. 3307
Bertheux B. 6581 7369
Bertolotti A. 1491 7169
Bertoniere N. R. 4485 7392
Besev C. 4441
Besnoy R. 7608
Bespalova V. V. 4214
Bestwick B. R. 7152
Bet D. G. 910
Betowski L. D. 7905
Betschev C. 4138
Bettridge J. 2944 2999
Betts M. 6701
Beurer W. 1756
Beutel K. 1610
Bevan M. 8874
Beyer J. 8467
Bezprozvannykh A. V. 7334 8041
Bhadra S. C. 5726
Bhagat R. B. 7466
Bhagwat R. S. 1247 1248 4498 6961 7564 7657 8534 8582
Bhargava S. 2023
Bhaskar P. 3350
Bhat N. V. 3254
Bhat P. G. 6638
Bhatawdekar S. P. 3219
Bhatnagar A. 4308
Bhatt B. N. 6860
Bhatt I. G. 3211 3228 3521 3808 6941 8137 8138
Bhatt J. K. 7582
Bhatt S. R. 7201
Bhattacharya D. K. 7191
Bhattacharya G. K. 5616
Bhattacharya S. K. 8025
Bhattacharyya N. 3609 6903
Bhattacharyya S. 1771
Bhaumik K. N. 905
Bhave P. V. 6663
Bhavsar M. D. 765 881 1942 3624 3633 6915 7927 7928
Bhor N. M. 6935
Bhute R. S. 2330
Biber B. L. 3811 3966 4895
Biche A. 7776
Bide M. 8463
Bidmon A. 888
Bielski A. 4761 4763
Bielski E. 149
Bienstock I. 1136
Bieser J. 3048 3412 5830
Biguet R. 6390
Bille H. 6141
Bille H. E. 3570
Billett M. 2133 3756
Billmeyer F. W. 3584 3852 6296
Binder R. 3354 8793
Bing H. 5650 7357
Binghua Z. 5658
Binnquan Z. 1699
Birshtein I. A. 101
Biryukov V. P. 3261
Biryukova N. I. 757
Bishop L. J. 5441
Bishop S. M. 7503
Bisoyi D. K. 8685
Bissmann O. 4176
Biswas A. 879
Bither P. G. 1881
Biyun W. 370

Bizer E. 3461
Bizer K. 1348
Blackburn R. 395
Blackwell J. 879
Blackwell K. T. 6289
Blackwood B. 1505 8280 8587
Blaf I. 3418
Blakeman N. E. 8687
Blanch R. 8151
Blanchard E. J. 380 1957 3605
Blanchard G. 6215 8631
Blanckenhorn R. 2724
Bland D. 584
Blankenship L. T. 4346
Blanton W. A. 6121
Blashko M. 7379
Blessing H. 5416
Blettenberger H. 3916
Blinicheva I. B. 4439
Bliniova T. Ya. 5325
Bliss T. 6382
Blivet J. C. 7836
Block I. 7294
Blocker J. 6787
Bloomfield J. 617 629 3768 3779 7018
Blue M. 2996
Blueweiss H. 2988
Blum P. W. 4390
Blus K. 451 6907
Bobleter O. 7103
Bochard O. 5864 6647 8272
Bockelmann E. 2051 3742 4594
Bodenhorst J. 5516
Bodenschatz S. 3863
Bodi B. 8586
Bodor F. 1702
Bodor G. 8359
Bodosi T. 823
Boehm C. 264 5901 5948 7537
Boehmer P. 3535
Boenigk B. 4684 4685 8712
Boesch I. 7103
Boettcher P. 3541
Bogdanov S. A. 5523
Bogetti T. A. 6297 7819
Boggiss I. W. 3000 4505
Boginich T. F. 5025
Bogoeva-Gaceva G. 7312
Bogolyuvoba L. V. 5039
Bogucki-Land B. 8140
Boguslawski J. 3126
Bogza A. D. 4748
Bohuniczky L. 8746
Boisset J. C. 6848
Bojanowski H. 948
Bojev K. 1706
Bokelman G. H. 4004
Bokic L. 4670
Boky V. I. 701
Boland E. W. 752 3143
Bolduc G. F. 6781
Bollen M. 4168 6633 6666 7403 8241
Bollen U. 4161
Bolobuyeva L. A. 323
Bolsman T. A. B. M. 2082
Bolze D. 5864 6647 8272
Bonaparte R. 7838
Bondarenko Yu. M. 131
Bondarev A. A. 374
Bondarev S. A. 4731
Bone J. A. 2752
Bonhomme L. 6012
Bonhomme L. L. 4337
Bonny-Wefers M. 3950
Bonsang F. 6001 7497
Bonus J. 4868
Booth M. 8473
Borbon J. 837
Borchert O. 2131 2874
Borggreve J. 291
Borisov A. S. 56
Borisov L. M. 5004
Borisova L. N. 5337
Borisova N. S. 5550
Born P. 1385 5424
Boroday N. V. 4614
Borodina O. E. 3967
Borovskii A. M. 3811 4895
Borozhtsov G. N. 5166
Borsa J. 7637
Borun L. 5709
Borzunov G. I. 4179 5025
Borzunov I. G. 4082
Bose A. 4433 7587
Bose S. K. 334 1290
Boss C. S. 8373
Bossmann A. 3832 4044
Bossmann B. 1441
Bothra K. C. 2002
Botos B. 1
Bottcher J. 2027
Botton S. 1331
Bouamrata A. 8738
Bouda F. 593 2957
Bouda F. J. 2960
Bourell D. L. 8356
Bove J. A. 7841
Bowles D. E. 4370
Bowles K. J. 7507 8357
Bowman K. W. 6432
Boyarkin K. E. 7361
Boyd W. R. 5576
Boyes K. 617 1377 2817 2933
Boyev K. 4947
Boyle R. 6333
Boylston E. K. 15 6473
Boynton R. M. 3842
Braccesi C. 6565
Bradley J. R. 7244 8074
Braeu G. 7530
Brage A. 5111
Bragg C. K. 6442 6452 7050 7056 7061 7273 8680
Brahim K. 2768
Branchesi M. 5091
Brand K. 860
Brandberg A. 674
Brandon R. E. 5978
Brannon H. 8
Branson D. H. 2975
Brasch N. W. 1514
Brashears A. D. 8857
Brassart M. 5730
Brauer B. 3924
Braun W. 407
Brauns J. 455 8568
Bredereck K. 2328
Brennan P. J. 7072
Bresee R. R. 2533 7275
Bressan G. 5546
Bretschneider H. 3545
Breurs M. 4020
Brew B. 8427
Bridge R. R. 6439
Briker B. Kh. 740
Brill M. H. 3580 3853 6287
Brink N. O. 4303
Brissie R. L. 5556 6954
Brockmanns K.-J. 8182
Brocks J. 3671
Broda J. 4011
Brodtka M. 5973
Brogle A. 2509
Brogly D. A. 6072
Brojewska B. 8408
Brokaw S. 7023
Broms B. B. 6784
Bronshteyn M. B. 5318
Brooks K. 6333
Brorens P. H. 1259 1264
Brorsson I. 7770
Broughton R. M. Jr. 2567
Broughton R. S. 6781
Brovtseva V. M. 4840
Brown G. 4595
Brown G. I. 2852
Brown R. 475
Brown R. S. 163 7049
Brown W. D. 4301
Brucker A. 4930
Brueckner H. 3995
Bruehl T. 3616 4399
Brueninger A. 8413
Brueninghaus K. W. 3734 4783 5592
Bruggeman J. P. 7373
Brumback N. 5427 5428
Brunner K. 7434
Brunnschweiler E. 4784
Bruno J. S. 477 2792 4299 6062 7642
Bruno T. S. 7335
Bruns K.-H. 5887
Brusentsova V. G. 3817
Brushwood D. E. 4811 6446
Bruske J. 887 958 963 4948 8200
Brusnikin A. F. 4126 4942
Brut-Brulyako A. B. 4722
Bruzelius M. 4520
Bryant N. O. 5363
Bryant R. 8667
Bryce G. 4539
Brydon A. 2501
Brydon A. G. 4991
Brylev P. N. 4090
Brzezinski J. 4734
Brzozowska K. 1822
Bubelo A. D. 5095
Bucci R. J. 1142
Buchanan D. R. 966 6052 8189
Bucher R. 1764 2585 3427 3431 3452 5867 8277
Buchfeld M. 3507
Buchsbaum G. 6289
Buck H. J. 4270 4346 8353
Buck M. B. 8861
Buck M. G. 8858 8859
Buckley C. A. 4766 4768
Bucurenci T. 3462
Budulan C. 1784
Buehler G. 3863 5053 5059 5910 5936 5967 7450 8293
Buehler M. 5154 8647
Buehlmann E. 8126
Buekine-Schwarz M. 7436 8407
Buettner G. 3900
Buffard J. Y. 7775
Bugao X. 6654
Buhl M. 493
Bujdosone-Kovacs I. 8581
Bukach M. M. 230
Bukayev P. T. 4214
Bukkanasuta A. 6772
Bulacu D. 1748 8723
Buleva N. B. 7300
Bulgakova I. V. 492
Bulik S. 66 1663 4856
Bulusheva N. Ye. 5555
Bunareva Z. S. 8219
Bunsell A. 1081
Bunsell A. R. 901 3984 7511
Burdick J. R. 6281
Burger R. 2339 5475 6361 6393
Burghardt W. 8712
Burke M. 2609
Burkitt F. H. 5916 6461
Burlefinger R. 4721
Burmina T. D. 172
Burnashir R. Z. 4945
Burnette S. B. 7027
Burnip M. S. 1593
Burns S. A. 3851
Burov N. N. 4198
Burrell R. 8891 8894 8910 8964
Burritt C. 4510 8946
Burt J. 4985
Burtscher E. 7103
Burwasser J. T. 5958
Busch J. 3910
Busfield K. 1662
Busfield W. K. 4885 8104
Bush D. I. 6777
Busler C. 6210
Busova N. A. 4999
Bussolini K. 1011
Butchers D. 6033
Butkova N. T. 4889 4891 5449 7327 7328
Buttgereit J. 4106
Butuzov E. 4215
Butyagin P. A. 4965 7327 7328 8071
Butylkina N. G. 8093
Buxton A. 1630 3178 8228
Buyarov A. I. 494
Buzanov G. B. 5049
Buzov B. A. 310 374
Bychkov Yu. N. 3286
Bykadorov R. V. 5026
Bykov A. N. 78
Bykov V. N. 7477
Bykova I. N. 3266 5183 8106
Byrom G. E. 1594
Byrom P. C. 1594
Byrska A. 4487
Bystrova I. B. 3265
Caban J. 4171
Caban J. C. 8702
Cadwallader M. 7767
Cafarella V. A. 2709
Cahill N. 2267
Cahpchevrier M. 7868
Cai X. 8177
Cai Z. 1843 8721
Caillet M. 5915 6680 6681 6703 7424 7429 7869 7888
Cain L. W. 1055
Cain P. 2079
Calamari T. A. 7645
Caldwell D. L. 4674 7165
Calhoun C. 7990
Calius E. P. 4321
Callan K. 3027
Callanan B. 7858
Callner S. 2867
Calogero F. 448
Calonnier M. 2679
Cama A. 6903
Cameron B. A. 1547
Canteimi T. 820 1174 1615 1892 2421 2439 2688 2942 4381 4867 7685
Cao L. 686
Capone G. J. 4025 8059
Cappelle Y. 2554
Carbonell J. 1467 2236 3116 4427

Cardamone J. M. 7271
Carella J. M. 8688
Carey J. 5959
Carfagni M. 6565
Carillon J.P. 7110
Carl W. R. 691
Carlier F. 6899 6921 8510
Carlson L. 1814 2173 2320 2398 5435
Carlsson D. J. 8101
Carlsson L. A. 6303 6320 7502
Carmical M. 7056
Carnaby G. A. 3 1687 3208 7291
Caro M. 8451
Carpignano R. 3629 6112 6911
Carpintero J. 2513
Carr C. M. 29 7062
Carr J. 7340
Carr W. W. 274 2656
Carraher C. 4466
Carrera E. 5757
Carrere C. 5364
Carrillo G. 4301
Carrington R. 2668
Carroll B. 4268
Carroll B. J. 8690
Carroll R. 3028
Cartwright D. 1136
Carty W. M. 8055
Cass G. R. 2771 8917
Castellan R. M. 8875
Castellas J. D. 7812
Castranova V. 8869 8877 8905
Castro L. 970 1719 2513 3046 3353 3387 3389 4944 6502 6503 6582 7065
Catalano E. A. 4758
Cates D. M. 2722 3567
Cavano P. 7507
Cavender D. 2844
Cawdron M. P. R. 4768
Cazzaro G. 6505
Cegarra J. 6902 8451 8505
Cekovic R. 2016
Celano E. 5480
Ceriani L. 262 1787 7425 7426 7437 7447 7457
Cernat M. 3320
Chadwick A. 1761
Chahal V. 6052
Chajduga A. 4487
Chakrabarti A. K. 8923
Chakraborti A. 6545 7385
Chamberlain T. R. 7630
Chamis C. C. 4328
Champault G. 1114
Champcherrier M. 5909
Champman S. 3438
Chanchaleyshvili M. D. 5294
Chanchikova O. D. 4975
Chandavarkar S. P. 3632 6914
Chandler A. 3683
Chandramohan A. 7184
Chandran K. 6614 7809
Chandran N. 1729
Chandrashekar S. 3350
Chang F.-K. 4330
Chang H. W. 4308 4309 6716
Chang I. Y. 4307 6546 7508 8730
Chang J. G. 1651
Chang T. 1047
Chang T. C. 4331
Chanzy H. 4003 6467
Chaplinskii S. I. 4959
Chapman G. 6866
Chapman G. M. 6053
Chapman R. 865
Chapman S. 5001 5010 5019 5021 5022 6628
Charbrunn K. 2197
Charette R. F. 1143
Charkovsky A. V. 6043
Charlton D. 3239 7806
Chatani Y. 1650 2457
Chatelan B. 3786
Chatterjea B. D. 6489
Chatterjee S. M. 947 6601
Chattopadhyay D. K. 3400 7213
Chattopadhyay R. 8694
Chattopadhyay S. 3933
Chattopadhyaya S. K. 6591
Chaturvedi L. N. 4431
Chaturvedi S. 3301 6113
Chatzi E. G. 6140 7297 7298 7798
Chaudhari U. R. 810
Chauhan D. B. 1841
Chauhan S. K. 5496
Chaunling W. 5706
Chavan R. B. 1243 1244 1245 2776 3647 6829
Chavan U. C. 765
Chavan U. G. 881
Chavany P. 6649
Checheneva T. M. 238
Cheek L. 380 398
Cheglakov M. A. 5172
Cheikhrouhou M. 6761
Chellamani P. 6570 7532
Chelyshev A. M. 105
Chelysheva L. V. 48
Chemodurova V. V. 4260
Chen A. T. 6313
Chen C.-C. 8545
Chen D. 8122
Chen D. T. 7220 7223
Chen G. Y. 5696
Chen G.-Y. 908
Chen J. K. 1824
Chen M. 8268
Chen M.-L. 8130
Chen P. 8824
Chen R. 8178
Chen S.-L. 418 5218 6103
Chen W. Y. 4332
Cheng C. Y. 4285 5667
Cheng G. C. 4332
Cheng I. Y. 4305
Chengxun W. 6317
Cherassky A. Ye. 275
Cherepen'ko A. P. 5383
Cherkassky A. Ye. 5518
Chermanowicz A. 1926
Chernetskii E. K. 757
Chernykh A. V. 154
Chervakova V. S. 4236
Chesnokova V. I. 5227
Cheuk K. 8511
Chevychelova N. M. 238
Chewning C. H. 3215
Chiang J. C. 5713
Chiba K. 4870
Chidambareswaran P. K. 3219 5604
Chigrineva R. I. 4837
Chihlar K. 2894
Chikaoka K. 1013
Chikh I. V. 5473
Childers E. 2434 3321 6081 8618
Chim E. S. M. 2642
Chin H. H. 7349
Chinara B. B. 7984
Chinatambi N. 1145
Chinchawade S. S. 7564
Chinennaya S. K. 7904
Chinn A. 8928
Chinyayeva V. L. 4983
Chipps E. J. 5580
Chira N. 3566
Chiranairadul P. 873
Chiriac M. 3708
Chiriac V. 1903
Chirls S. B. 597 613 2097 2873 2879 2897 2900 2904 3780
Chista S. 2024
Chitre S. Y. 6254
Chitroda D. C. 8479
Chizuko K. 1618
Chlanda F. P. 6385
Chmela S. 8101
Cho G. S. 1673
Cho H. H. 88 103
Cho S. C. 1680
Choksey N. N. 8013 8937
Chong C. L. 7262
Chono S. 166 4982 8198
Choper E. A. 8852
Chopra S. K. 32 975 4016
Chou J.-W. 6321
Chou T.-W. 688 1440
Choudhary V. 8517
Chrilin A. S. 4374
Christ W. M. 4452
Christensen L. C. 6056
Christensen R. M. 8355
Christie R. M. 1951 7631
Christoe J. R. 4010
Christopher B. R. 7834
Christov M. 4352
Chryst K. 202
Chu H. 4302
Chu K. Y. 3607
Chu X. 8699
Chuanova A. S. 4936
Chuanzheng C. 874
Chubanova I. N. 761
Chubarova S. Z. 375
Chudinov V. N. 5524
Chugin V. V. 4212
Chui Z. 8110
Chukalovskii P. A. 8071
Chukayev Yu. F. 124 157
Chumak A. A. 5368 6224
Chun B. 7480
Chung W. C. 4331
Chunhua L. 5716 7849
Chunlan W. 481
Church D. 2134 2842 2890 2976 3758 6236
Chursina L. A. 4992
Chute E. 2254 7232 7236 7237
Chuykova L. F. 6803
Chuzba V. V. 5497
Chyapononene Ye. P. 317
Chylewska B. 4091
Ciaperoni A. 8120
Ciapini E. 6861 8471
Ciferri A. 6542
Cihlar K. 1326 1334
Cirnecioglu A. L. 6388
Cinard M. 5387
Cinkotai F. F. 8867
Ciobanu A. 3307
Ciocan C. C. 8212
Cirino M. 7825
Ciroski K. 5663
Cisak B. 2200
Cizek J. 1450 1721
Claassen H. 347
Clark G. 3830
Clark K. 562
Clark T. 543 554 5481
Clauson D. 7071
Clauss B. 3666 4491 4492
Claxton L. D. 7906
Clegg D. W. 6309
Clemison J. 5420
Clermont H. 4106
Cloninger J. 4550 4551
Cloutier M. M. 8893
Cloyd M. 8889
Clulow E. E. 666
Clune R. 1010 1534 1554 1557 2247 2496 2542 2589 3077 3547 3595 4224 4715 5089 5476 5510 5897 6358 6594 6597 8519 8601 8782 8791
Cockrell B. Y. 8879
Coderch L. 4824
Coderch M. L. 2795
Coffin D. P. 7680
Cogno A. A. 3581
Cogno J. A. 2228 2229
Cogswell F. N. 4317
Cohen J. B. 2226
Cohen M. 977 1382 1574 1860 2183 2650 3010 3998
Cohen Y. 2483 2484 7353
Cojocaru N. 3336
Cole D. 3100
Cole M. L. 3100
Cole W. R. 7679
Cole W. R. Jr. 528
Coleman B. D. 7293
Colgate A. I. 770 800 1181 1674 2829 2831 2964 3097 5477 5578 5594
Colin G. 8101
Collier A. 2519 2587 6694
Collings T. A. 2636
Collins J. 8943
Collins M. J. 368 3575 8033
Collishaw P. 7947
Collyer A. A. 6309
Colman G. 645 2166
Colombier G. 7855
Colombo A. 5924 8285 8308
Colonna G. M. 7800
Colucci R. C. 2047
Columbus E. P. 6440 6442
Comelles F. 8547
Commanday S. 2738
Companys J. V. 2551 3411 8249
Condra G. D. 6451
Conejo A. G. 1906
Cong Z. 400
Connemann E. 2027
Conno J. C. 2228
Connolly H. J. 5582
Connolly J. 2176 2184
Connor H. G. 3601
Conroy L. 6665
Considine T. 1136
Constantine R. 7128
Cook F. L. 274 379
Cook H. E. 2555
Cooke B. 3131
Cooke F. T. 7270
Cooke G. 1492
Cooke R. G. 3857
Cooke T. F. 8399
Cooke W. D. 1507 7085
Cooney J. D. 2658
Cooper G. W. 6069

Cooper H. B. 7055
Coppin P. 4282 4988
Corbellini E. 1312 1355 4980 7720
Cordell T. M. 6306
Cordner I. 1119
Cordova D. S. 4310
Cornea N. 3343
Cornell H. J. 2709 3752
Cortez F. M. 7165
Corwin N. 1395
Cosimini H. M. 7738
Cosovanu D. 8112
Costa A. 5912
Costin G. 2932
Cothren S. E. 7762
Cotney A. D. 1734
Cottenden A. 6033
Coudray O. 6132 6856
Coughlin M. 6197
Courter E. 8540
Cousin J. 1493
Cousins S. A. 7889
Coven S. 1263
Craig J. 7976
Cramer J. M. 3031
Crane J. P. 2691 5999 6714
Crawshaw G. 35 933 1821 6486 6940
Crawshaw G. H. 5621 6934
Creaser C. S. 7099
Cremer R. D. 7262
Cretu S. 2301 3962 3965
Crevecoeur G. 4064
Crewdson L. F. E. 7070
Crews A. L. 4373 6076
Crews P. 469
Crews P. C. 5202
Crider V. 3487
Crisco K. R. 524
Crisp D. J. 3026
Crnogorac Lj. 1968
Croft P. 3039
Croman R. B. 4305 6323 7499
Crompton R. T. 6263
Crone W. 3098
Crosby J. M. 1079 4318
Cruycke B. 4719 8183 8816 8817
Cruz A. 5041
Csoszrie-Csajkovszky M. 8704
Cuccio A. 602 2883
Cuculo J. A. 908 5696
Cudmore R. S. 3576 7292 8461
Cui K.-H. 8463
Cuijpers J. 1953
Culp T. W. 7048
Cummings A. L. 5819
Cunko R. 2210
Curiskis J. I. 3 2574
Curley J. B. 8972
Curry J. C. C. 4430
Curtis D. C. 8736
Curtis P. T. 2634
Czaja A. 4903
Czakert W. 4207
Czapay M. 4128 8193
Czarnecka-Kalinowska J. 2294
Czuczy A. 8586
Dabney B. J. 447 448
Dabrowski A. 153 4896
Dadey J. 1511
Dahlstroehm N. 1133
Dai S. R. 3517
Daily C. M. 8341
Dajun C. 5652
Dale R. S. 5978
Dallas M. J. 6034
Dalton F. K. 848
Daly J. M. 632 1413 3020 5432 7035 7752
Damjanov G. 4352
Dan H. 5608
Dan M. 6387 7924
Dan Y. 4989
Dan Z. 2012
Daneliya L. Yu. 5192
Daniels K. M. 1839
Daniliuc L. 1921 3207
Danilov V. V. 119
Dankovics A. 8359
Danna G. P. 7335
Dantuluri S. R. 6068
Dao D. 8824
Daqing Q. 243
Das R. K. 49
Dash M. 2035
Date M. 8433
Datong Y. 6373 7896
Datta A. K. 4661
Datta U. 5726
Datye K. V. 3604 8388
Dave D. 7582
Dave P. 4431
Davey C. R. 4287 5668
David H. G. 3239
David R. 3135
Davidson B. M. 7095
Davidson J. V. 1741
Davidson R. S. 2720
Davidson W. A. B. 739 2128 2951 3404 3681 5911 7124 7144 7185 8966
Davidzon M. I. 5246
Davies A. M. C. 7099
Davies S. 1466 2404 2477 2487 6534 7546 8045
Davis C. R. 7480
Davis M. 946
Davis S. 632 1415 2159
Davlatyan N. L. 4355
Dawoud M. A. 3608 7593 8513
Dawson R. M. 222
Dawydoff W. 915
Day A. 4150
Day M. 2658
Day R. J. 6064
Dayer J. M. 8868
Daziens P. 7729
de Andres A. 3147
de Araujo M. D. 5912
de Candia F. 7343
de Castellar M. 1719
de Castellar M. D. 950 970 2510 3387 3836 4931 4944 5561 6582 7065 7088
de Garidel R. 7782 7837
de Groot M. 687
de Groot M. T. 7522 7761
de Jong S. 673 3208
De Koninck M.-C. 8657
De La Maza A. 8547
De Lucca A. J. 8855
De Maria A. 694
de Mattiello M. L. F. 1199
De Micheli R. 8688
De Moor C. P. 8917
de Rochemonteix B. 8868
De Wismes D. 1075
Dean J. 1127 3188 4365
Dean R. R. 8211
Deatherage J. D. 7788
Debnath C. R. 1880 3230 7544 8414
Debruyere L. 6259
DeFranco G. R. 5411
Degoutte G. 7042
Degtyarev I. A. 4163
Degtyarev Ye. F. 533
Deguchi W. 1180
Deininger W. 7075
Delmas J. L. 3134
Delmas P. 7775 7835
DeLong D. A. 8884
DeLong D. S. 8869 8877 8905
DeLong M. R. 1356
Delvin A. 4694
Dembicki E. 7529
Demidova Ye. N. 170
Demina T. G. 4236
Deming Z. 4901
Demir A. 4961 6606
Demmin T. R. 7920
Demoures S. 4832
Dempsey C. R. 7907 7915
Dempsey E. 1526 7113 7156 7249 7264 8527
den Hoedt G. 6777
Denby E. F. 7813
Dendo T. 5018
Denisenko I. A. 5470
Dennis L. A. 966
Dent J. B. 1687
Denter U. 4656 4696
Denton M. 900 944 965 1714 1715
Denton M. J. 3270 4962 6352
Deopura B. L. 905 910 4053
Derbisher V. Ye. 5046 6279
Derichs J. 3356 4928
Deroche P. Y. 2241 5866 5868 6366
Deroche P.-Y. 6636
Deryagina G. S. 4735
Desai A. N. 5791 6727
Desai J. R. 8838
Desai M. V. 1239
Desai P. 8015
Deshmukh S. V. 2746 3602
Deshpande S. D. 6858
Desilets D. 4522
Desimone L. 7294
Despradelles A. M. 6080
Dessouki H. A. 1229
Deussen H. 6477
Dever J. K. 7272
Devi G. R. 7471
DeVilbiss T. A. 2644
DeVries K. L. 4650 8020
DeVry W. E. 4283
DeWitt W. G. 5984
Dexin F. 177 2696
Dexter D. W. 8619
Dey N. P. 6551 8079
Dey S. K. 3352 4150 7985
Dhar V. K. 5712
Dhara D. 4440
Dharani L. R. 1448
Dhawan K. 4925 6573 6640
Dhawanjewar N. G. 3435
Dhiman B. 2833
Dhingra R. 8717
Dhingra R. C. 673 1365
Di Modica G. 3629 6112
Dianov V. N. 4490
Dianxun W. 874
Dib P. S. 7773
Dickinson J. 2595
Dickinson K. 3569
Dickson D. W. 7911
Dieckmann J. 2712
Diehl W. L. 2610
Diekmann C. 4177
Dienst N. 3634 6900
Dierickx W. 6782 7093
Dierkes G. 3082 6419 6830
Digges M.-D. 4540
Dillard D. A. 7847
Dilling P. 436 4453
Dilo J. P. 3488
Dilo J.-P. 8334
DiMaria E. 1481 1483 2099 2901 5234
Dimarogonas A. 7510
Dimitrieva I. A. 320
Dimov K. 4138
Dinculescu S. 1725
Dingfang G. 5703 7331 7384
Dinghua B. 5646
Dingus V. R. 7116
Dionne J.-G. 3977
DiPaolo B. 1142
Dirochka A. A. 1218
Disher M. 564 566 699 2305 3763 3895 5133 6990
Dittman A. 3535
Dittrich J.-H. 6952
Divecha A. P. 6004
Dixit M. D. 1184 3651 3958 6930
Dixon M. 7621
Djuwita S. 3658
Dmitriev V. A. 95 8077
Dmitriyeva T. I. 551
Dobb M. G. 6510
Dobbs J. 7055
Dobiech I. 4432
Dobner R. 2807
Dobre I. 3343
Dobrokhotov N. K. 4095
Dobrzanski E. 1767 4211
Dockery A. 6613 8372
Doctor B. V. 3534 6611 7153
Dodds M. M. 1177 2751
Doerne V. 3253
Dohmyo M. 3654
Dolgopolova N. Yu. 7327 7328
Dolgopolsky A. 293
Dolhan P. A. 3062
Domagala R. 5512
Dome V. 8822
Domelsmith L. N. 7276 7992 8881 8886 8899
Dominguez J. G. 2783 2795
Dominguez J. J. G. 3553
Dominiak Z. 4116
Dominikowski W. 8408
Donaldson R. A. 1499
Donaldson S. L. 7820
Doncean G. 1905
Dondoladze Z. G. 5294
Donjyo I. 7381
Donnelly D. S. 4310
Donovan J. G. 886 5674
Donze J. J. 3137 6082 6095 6135 6921 7551
Doraiswamy I. 5489
Doran A. F. 7598
Dorey S. E. 3857
Dorn G. 4721
Dornhagen J. 6823
Dorogy W. E. Jr. 7326
Dortmans J. P. M. 8109
Doshi B. A. 1214 3597
Doshi H. S. 2734
Doshi R. P. 677
Dostal K. A. 7907 7915
Dottore J. 3509
Dottridge S. 1665
Douglas B. A. 2464 3385 4075 6484 6959
Douglas K. 3338 4926 6642

Douglas S. A. S. 853
Douligeridis M. B. 5188
Dovii E. V. 8031
Dow N. F. 7827
Dowell G. 748
Dowling L. M. 8689
Draabe U. 3935
Dragomir M. 8344
Drakunov S. V. 4731
Drean J. Y. 2500 5751 5786 5800 6268 6579 6583 7369 8224
Dreszer A. 4478
Drexler W. 5796
Driscoll A. 1623
Driscoll J. L. 8929
Driscoll S. B. 7243
Drozdz E. 4913
Drozobovskii V. N. 5542
Drukker E. 2641
Drul' Yu. V. 4678
Druzik J. R. 2771 8917
Dryagina T. I. 4403
Drye T. R. 1079
Dubini-Paglia R. 6324
Dubinina N. K. 4621
Dubois R. 4436
Duchon F. 7420
Duckett R. A. 8427
Dudeja V. D. 5483
Dudka N. G. 307
Dudzik M. 986
Duerig G. 7194
Duessen H. 5773
Duff M. 977 1382 1639 1649 1676 2252 2402 2468 3090 5657
Duffy H. 1393
Dugar R. 6931 7632 7635
Dugdale T. J. 883
Duginova T. A. 144
Dugnani G. 5486
Dujmovic T. 7949
Duke-Williams D. 4707 7119 8775
Dukovskaya I. I. 323
Dulaj M. 4394
Dunbar J. J. 8036
Dunnewind H. J. 7761
Dunphy J. F. 6515
Dupont G. 6099 6883
Dupuis C. W. 6009
Dupuis G. 6684
Durovic M. 1762
Durygina T. F. 5361
Durzhinina T. V. 48
Dusserre P. 3137
Duthie A. C. 4341
Dutkiewicz J. 8873
Dutta B. 5817
Dutta I. 8356
Dworzynski H. 4097 4100
Dyablova L. D. 5383
Dyakovova A. Yu. 4256
Dykov A. N. 491
Dyring T. C. 8664
Dyukanova T. I. 150 4117
Dzhavakhishvili D. Sh. 5123 6025 6797 7545
Dzhokic D. 1750 7861
Dzholdasbekov U. A. 4214
Dzhulakidze E. P. 5082
Dziag D. 4764
Dziubaltowski W. 4219
Earl D. 1136
Earl J. 1597
East G. C. 6388
Eaton G. M. 5667
Ebert H. 3743
Ecker K. 8581
Eckert C. H. 4311
Eckhardt M. 4259 5447
Eckley R. C. 6457
Edberg B. 1506
Edgar T. V. 6783
Edmands C. C. 7435
Edmunds A. 3041
Edris E. V. Jr. 7785
Edwards J. H. 8874
Edwards K. 2146
Effing M. 7134
Efimova S. G. 7327 7328
Efrat S. 5596 8279
Efros L. S. 3296
Efros R. D. 485
Egbers G. 3875 3914 4704 6351 8758
Egerton M. W. 4174
Egli R. 3623 7613
Egorova R. V. 95 3565
Eguchi T. 3043
Ehrhardt S. 3399
Ehrler P. 1843 8721
Ehrlich B. H. 6377
Ehrlich P. C. 10 831 891 892 1991 1993 2129 2343 2444 3154 4849 4850 6413 7946
Eichert U. 6039
Eifer I. Z. 101
Einsele U. 2798 8443
Einwiller A. 287
Eisele D. 5970
Eisenberg M. M. 7713
Ejiri K. 4468 6854
El Farhaty K. A. 899
El Messiry M. A. 2526
El Mogahzy Y. E. 7059
El Niklawy M. M. 899
El Shiekh A. 4267 6717
El-Ansary A. L. 4467
El-Dessouki T. 899 4653
El-Farhaty K. 4653
El-Farhaty K. A. 897
El-Rafie M. H. 2223
El-Sayed W. A. 6873 7589
El-Sharkawy A. F. 4945
El-Shiekh A. 8203
El-Sisi E. 8553
El-Thalouth I. A. 8554
Elagizy S. A. 6128
Elayathu P. N. 8491
Elbert H. 3860 3862 6918 7625
Eley J. R. 116 7806
Elgert K.-F. 4656 4696
Elissalde M. H. 8865 8876
Eljack I. 4906
Ellam G. 3115
Ellerstein S. M. 5952
Elling L. 833
Ellington T. 6411
Ellington T. G. 7943
Elliott K. H. 836 1687
Ellul M. D. 6325 6326
Elmorsy S. S. 6128
Elsner A. E. 3851
Elsner O. 5178 5605
Elston C. 4295
Emerson R. J. 6325 6326
Emery N. B. 8189
Emri I. 1782
Endo M. 8027
Engel K. G. 4057
Engels K. 4841
Engle E. J. 4625
English S. 380
English S. J. 434 6127
Enikeeva A. K. 7360
Enneking H. 2481
Epps H. E. 6278
Erdal S. 6898
Erhart W. 1685 3256 3280
Eriksson L. 7770
Erlac E. 1979
Erler W. 3907
Ermolenko I. N. 7308
Ernestus J. 3522
Erra P. 2783 2795 3553 4824
Ershov B. G. 4891 8029
Ertl H. 3950
Ervin C. 7729
Erzinger U. 4470
Esancy J. F. 447 448 1945 7610 7611 7906
Esancy M. K. 447 1945 7906
Etayo J. M. 1291
Ethridge D. 2415
Ethridge D. E. 6432 6451
Ethridge F. A. 6609
Ethridge M. D. 4813 8940
Etters J. N. 380 434 1922 3038 5254 6127 8468
Evangelides J. S. 7359
Evans G. 3804 6098
Evans K. E. 2214
Evarts R. M. 2889
Exbrayat P. E. 2500
Fabian K. L. 8682
Fabian K.-L. 3407
Fabian W. 6909
Fadda A. A. 6128
Fader M. 6033
Fagan D. 7921
Fagan R. 1238
Fahrni F. 3868
Faig K. 2061 2073
Failla M. D. 8688
Failla S. 8292 8804
Faiola L. 2825
Fairhead T. S. 846
Fairman H. S. 3847 3852
Fallon J. 596 1480 1530 2084 2379 2888 2902 3015 4847 4848 4923 5231 5648
Falthansl G. 3994 4032
Fang P. 4302
Fannin J. 7832
Fantry J. J. 463
Faragher E. 8867
Farkas K. 7925
Farrar D. M. 7832
Farris R. J. 4067 7350
Fasth R. A. 4311
Fatelewitz M. 2600
Fatjo M. M. 3411
Faulkner-Wagoner J. 7677
Faur V. 3418
Favela J. 7725
Favry Y. 901
Fayerman V. T. 959
Fearnley N. R. 21
Fedeli E. 6220
Federspiel C. 7541
Federspiel C. C. 7816
Fedorenkov A. A. 7983
Fedorov V. P. 5331
Fedorova L. M. 4012
Fedorova R. G. 4846 7299
Fedorovskaya V. S. 319 4973
Fedoseyev G. N. 4560
Fedoseyev V. N. 498
Fedotov Yu. A. 90
Fedotovsky S. V. 4546
Fedulova L. I. 377
Fehd D. N. 4540
Fehrer E. 3351
Fei J. 8441
Fein L. 1323
Feinberg B. 2324
Feldman H. A. 8911
Feldman L. A. 7359
Feldman S. 5571
Fellman S. J. 6377
Fellows S. 2966 3759
Fenin V. A. 102
Ferloni A. 6349
Ferrarini A. 65
Ferrati R. 7456
Ferrero F. 8008
Ferrigno T. H. 8560
Fesenko A. G. 531
Fetkulova Ye. B. 1242
Fiedorowicz Z. 4903
Field J. 1935 8798
Fieles-Kahl N. 3122
Fikhman V. D. 8073
Fil'bert D. V. 54 4957
Filatov V. N. 311 5130 5144
Filatov Yu. V. 4914
Filichev A. V. 8077
Filimonova L. I. 176 5457
Filipiak I. 2681
Filippov A. E. 4957 7337
Filippov P. A. 5130
Filippova M. K. 5172
Filippova O. V. 4052 5143
Filonenko V. I. 4113
Fine J. 8892
Finger G. G. 52 8031
Fink H. 46 1967
Fink P. 692 4647 7044
Finkelstein M. A. 3589
Finnerty A. 1995
Finnimore E. 3054 8497
Fioletova T. N. 5555
Firkowska A. 4002
Fischer B. 67 280 5690
Fischer D. 2028
Fischer G. 4379
Fischer J. 6596
Fischer J. J. 8853 8857 8895 8896
Fischer K. 2788 3300
Fischer R. 4502 6906 8563
Fischer T. 3875 4704 7150 8812
Fisher G. 2528 3014 3555 6946 8666
Fisher M. J. 3733 5398 7706
Fisher M. J. R. 7010
Fisher P. 8895
Fisher S. 2998 3792
Fisichella S. 418 3593 5218 8481
Fissan H. 1099
Fitch R. A. 1498
Fitz E. 3130
Fitz P. 842 1627
Fleischer P. 694
Fleischfresser B. E. 3233
Flensberg H. 1928
Fletcher C. 591
Flint P. 3241
Florentine R. A. 4342
Floria D. 3320
Floyd F. L. 8146
Fluet J. E. 7834
Foarde K. 8896
Foarde K. K. 8853
Fogassy E. 7637
Foley B. 2111
Foley P. 4050 8060
Fomicheva T. N. 4998
Fomin H. 112
Fong B. C. 6145

Fong K. L. 4683
Fons M. 2846
Fontaine R. 8294
Ford J. 2033
Ford J. E. 5714 8114
Fornaro G. 5528 8008
Fornes R. E. 1827 3513 4769 4770 7490
Forney R. C. 3199
Fortess F. 653 797 5349
Fortin R. 424
Fortuniak K. 1869
Foster J. H. 5980
Foster P. W. 5986
Foster V. R. 4466
Fouda I. M. 897 899 4653
Foulds R. A. 28
Fourne F. 5634 6511 8064 8076
Fourne R. 8067
Foust D. 2243 3155 7865 8584
Fowler J. 7777 7785
Fowler T. J. 7796
Fox E. 8660
Frahne D. 3144
Frame M. 1399
Frances A. 3509
Francis R. 6859
Francise C. 7977
Franck R. R. 2422
Frank B. 6339
Frank C. W. 2485
Frankl J. 3558 7591
Franklin W. E. 690 2794 7640
Frankowski A. 4083
Franks L. 7777
Fraser A. J. 545
Fratczak Z. 4074
Frauenknecht J. 1941 2750 5222 5223 6115
Frazer D. G. 8869 8877 8884 8905
Freddi G. 7800
Fredricks S. D. 2465 3869 8768
Freeland W. 7698
Freeman H. S. 447 448 1945 1946 7610 7611 7624 7906
Freeman R. 4549
Frei G. 5225
Freiberg H. 5335
Freitag J. 8083
Frenkel' G. G. 4882
Frenzel B. 6730
Fressola P. 604 605 607 1314 1315 2090 2092 2093 2094 2891 2898 2899 2905 2906 2907 2908 2911
Frey M. 4910
Freybert Ye. Ye. 5388
Freytag R. 3137
Frick E. 3454 8223
Fridman L. I. 7303 7304 8846
Friedberger M. P. 675
Friedenberg E. 1373 6403 7106
Friedlin R. 30
Friedrich K. 290 293 871 3258 7825 7828
Friese R. 2827 3757 6182 6194
Friscic V. 1679
Frishan S. R. A. 7999
Fritsche G. 3507
Fritze P.-A. 625
Frolkov Yu. A. 7318
Frolov V. A. 491
Frolova O. A. 527
Fronskaya E. V. 5100
Frontczak-Wasiak I. 4207 4209
Frost C. M. 7335
Frumin L. Ye. 325
Frustie M. J. 7756
Fry F. H. 1423
Fry G. A. 2224 3841 6290
Frydrych I. 1443 4076 4658 4659
Frydrych W. 4137
Frygina I. D. 4915
Fu-ting L. 440
Fuchikami N. 1449
Fuchs E. 1203
Fugiglando P. 4892 5721
Fujihara H. 5289
Fujii T. 671 6277
Fujiki K. 5560
Fujimoto A. 8070 8134
Fujimoto K. 1661 6552 8111
Fujishiro S. 2736
Fujita U. 920
Fujiwara H. 7540
Fukai B. K. 8730
Fukai S. 996 2570
Fukami H. 6226
Fukasaku M. 2878
Fukatsu K. 3146 6480
Fuks A. I. 96
Fuks V. S. 4126
Fukuda M. 1446 8377
Fukuda N. 7844
Fukumori K. 8377
Fukunaga H. 6321
Fulmer T. D. 408 3121 3598 3619 6105 6133 6864 6893 8437
Fumoto I. 1227
Fundator R. Sh. 5302
Funder A. 399
Funke B. 7179
Furter R. 1451
Furukawa A. 7349
Furukawa T. 893 1241 1486 2340 2414 2517 2582 4853 5204 5507 6495 6595 6692 8825
Furusaki S. 3485
Furuta H. 760 5212
Furuta M. 6718
Fuss F. 3860 3862 6918 7625
Gabor J. 726
Gabrys M. 3236
Gaca T. 2525
Gacon J. 1988 6605 7296 8451
Gaddis J. L. 4765 8851
Gador W. 3498
Gaetan M. 5391 5578 5583 6168 6968 7675
Gafiteanu R. 8163
Gagle R. 3030
Gal'braikh L. S. 48
Galashina V. N. 4406
Galbraith R. L. 1278
Galiotis C. 6310
Gallaway G. 4525
Gallico L. 8714
Galpin M. 2825
Galtsov V. A. 740
Galuszynski S. 3711 7678
Galvin T. J. 4347
Galyk I. S. 315 4678 5119 6026
Gambill M. 3710
Gammell P. M. 1462
Gandhi R. S. 432 1840 1961 3813 5700 7405 7857 8710 8729
Gandurin L. I. 4163
Ganem M. 1992 2941 3686
Ganesan N. 3815 8739
Gangakhedkar N. S. 446
Gangar H. U. 3929 3930
Gannaway J. R. 7272
Ganzyuk L. I. 184 4999
Gaonkar S. M. 6429 6431
Garcia S. 839 3025
Garde A. R. 6584 7174 8819
Gardner W. H. 5654
Gardos G. 3915
Garg A. C. 6006 6008
Garner P. 2069 2076 2870 4587 4588 6204 6213 8755 8845
Garner T. H. 6454
Garnsworthy R. K. 7483
Garozzo D. 906
Garrett P. D. 2491 8733
Garton A. 1826
Gartseva L. A. 4523
Garvanska R. 412
Gasell K. T. 3879
Gaspar L. 7760
Gatty C. 8853 8866 8872 8879
Gauchel J. V. 5740
Gaudert P. C. 6315
Gaudino R. 1704
Gavin K. 1421 3005 4971 7029 7030 7032 7034 7036 7753
Gavrilov B. L. 4179
Gavrilov S. N. 4864 5124
Gawish S. M. 6273
Gawrysiak J. 1916
Gayczak E. 4015
Gaydamaka V. K. 7159 7161
Gaydarova L. L. 4052 5143
Gaydeu O. I. 5035
Gayevaya Ye. V. 595 5408
Gebhardt P. 3454 8223
Geczy I. 4772
Gee E. 3044
Geerdes J. D. 6427 8050
Gefter P. L. 232 5025
Gega H. 4487
Gehrlein H. 6823
Geisendorfer G. T. 4347
Geisler H. 4118
Geller V. E. 171
Gellers S. 614 622 1318 1329 2920 2923 2924 2925 2927 2984 4008 8624
Gembitskii L. S. 3966
Geng L. 686
Genis A. V. 102
Gens A. M. 757
Gensrich H. J. 3255
Gentry S. T. 5984
Genvarev N. I. 4170
Genzer M. S. 5130
George L. 2088 2089 2109
George M. 6355
Georgieva A. 7637
Gerashchenko T. V. 5388
Gerasimov M. N. 5307
Gerasimov V. D. 90
Gerasimowicz W. V. 7062
Gerber H. 4460
Gerber S. M. 7912
Gerdov V. E. 135
Gerking L. 1159 1813
Gerner J. 4816
Gershoni H. 7681
Gershumov I. Sh. 6788
Gervasi J. 3840
Gessler L. 2114 2118
Gessner L. 1341 1378 2115
Gessner L. F. 4608
Getgood J. 1136
Getsberger K. 7791
Geubtner M. 4471
Gevondyan R. Z. 5406
Ghaffarian R. 4339
Gharia M. M. 7200
Ghio A. J. 8875
Ghonium A. 1229
Ghosal A. K. 1625
Ghose P. K. 334
Ghosh A. 3352
Ghosh B. S. 828
Ghosh S. 6263 7067
Ghosh S. K. 1880 3230 3352 4150 7985
Ghosh S. N. 5616
Ghosh T. 826
Giani R. 6962
Gibbons W. 1322 1327 2929 2949
Gibbs H. H. 4304
Gibson P. E. 4293
Gilbert C. S. 3685
Gilbert R. D. 1827 3513 4769 4770 7490
Giles J. B. 6053
Gilhaus K. 1689
Gilkerson Y. 3197
Gill P. 7740
Gill R. A. 84 5963 5984
Gillease P. G. 1476
Gillespie J. W. 3855 6297 6303 6320 7502
Gillespie J. W. Jr. 7819
Gillespie M. 4085
Gilmartin R. J. 2238
Ginell W. S. 7281
Ginnane C. 568
Ginsberg S. 629 1998 5430
Ginty C. A. 4328
Ginzburg R. F. 703
Gipson J. R. 6450
Girgis M. M. 8207
Girling R. B. 3042
Girone J. A. 3798
Girot F. A. 878
Giroud J.-P. 7790
Gitis S. S. 90
Giuffrida M. 906
Giuliano R. 2843
Glade E. H. 7270
Glade E. H. Jr. 7221
Gladkaya L. V. 363
Gladkov S. V. 498
Glaser I. 5740
Glavochevskaya R. A. 95 3565
Glazokovskii Yu. V. 63
Glazov V. G. 4122
Glazunov V. F. 5498
Gligorijevic V. 1782
Glot I. O. 56
Glover B. 722 8813
Glowacka S. 4017
Glowacki Z. 4137
Glowinkowska E. 120 143
Glubish P. A. 309 4353 6944
Glushkova Ye. V. 5052
Gmeiner D. 7103
Gnanamuthu D. S. 1048
Gnevusheva I. B. 6803
Gniotek K. 4677
Gnusina V. T. 241
Goadby D. R. 1024 2803 4252

5070 6695 6699 8282 8309
Godderis P. 2026
Goddin L. A. 644
Godleski J. J. 8911
Godovskii Yu. K. 5098 8023
Goebel I. 4070
Goeksoy M. 7085
Goel R. N. 1519
Goenner K. 5058
Goeschel G. 3996 3997 7980
Goettling W. 4454 4455
Gogin A. D. 4900
Goh S. C. 2341
Goikhman A. Sh. 8460
Gokhale S. V. 8482 8512
Goksoy M. 3816
Goldin A. D. 5527
Goldis I. D. 4915
Goldman E. 4778
Goldsmith J. 8919
Goldstein G. 589 1362
Goldstein K. 7881
Golec Z. 205
Golob V. 3582
Golova L. K. 3967
Golubev A. V. 6157
Golubev V. G. 3286
Goluvev M. N. 4531
Gomez E. 44 3291 8204
Gomzina I. K. 8106
Goncharenko V. M. 4531
Goncharova T. A. 3810
Gonser W. 3863
Gonzales E. J. 3605
Goossens B. 299 6556
Gopsha L. N. 5224
Gor S. J. 8830
Gorbachik V. Ye. 6043
Gorbonosova V. I. 5469
Gorchakova V. M. 4499
Gordeyev V. A. 4173 4214 5032
Gordinskii A. A. 3261
Gordon J. 6294
Gordon T. 8892
Gore A. S. 2746 3602
Gore A. V. 1975 6878 8488
Gorina G. S. 5337
Gorina L. V. 311
Gorrafa A. A-M. 6714
Goryacheva G. B. 4483
Goswami B. C. 6068 7056
Goswami S. K. 8861
Goto H. 8890
Gould M. C. 8885
Gourc J.-P. 7835 7852
Gourdenne A. 7305
Governale C. 353
Gowariker V. R. 7206
Goynes W. R. 7642 7992
Grad I. N. 532 4544 6184
Grad N. N. 5374
Grady J. E. 3516
Graf H. G. 4395
Graham J. F. 1389 1494
Graham L. 5242 5251
Gralinski M. 4464 4465
Grancaric A. M. 1846
Granitsa O. V. 5293
Graven A. A. 3882
Graves D. 6747
Graves D. P. 1839
Gray D. G. 8367
Gray D. J. 8463
Greaves I. A. 8911
Grebenchikov Ye. N. 378
Grebennikov S. F. 7303 7304 8845
Green C. C. 7048
Green D. 1747
Green S. W. 7515
Greenley D. E. 5402
Greenough D. 8897
Greenwood E. J. 4281
Greenwood K. 1496
Greer J. E. 2885
Gregor E. C. 3528 8643
Greif S. 3138
Greiling R. 3923
Greissinger H. F. 3406 3894
Gribanov S. A. 4957
Gribanova Z. S. 4621
Griffin D. H. 1017
Griffin I. Jr. 2562
Griffin O. H. 6015
Griffith R. 2616
Griffith S. 4362 7394 8772
Griffith S. R. 7057
Griffiths J. 1951
Griffiths-Johnson D. A. 8883
Grigor'ava L. N. 4829
Grigor'ev P. I. 4957
Grigor'eva I. N. 7341
Grigor'yeva S. N. 124
Grigorescu M. 8400
Grigoriu A. 1921 3207 3307
Grigoryan V. S. 325
Grimes C. W. 5344
Grishchenko V. I. 5542
Grishina N. V. 8062
Groblinski K. 4166
Groh Z. 5674
Grom A. A. 8218
Gromova O. V. 1230
Groom J. L. 6783
Grosberg P. 5771 7376
Grosjean D. 2771 8917
Gross D. 1015 1018 1030 1479 1774 2543 3123 4056 4223 4242 4619 4699 4700 5459 6189 6558 8229
Gross J. 7684
Grosse R. 732
Grosslaub K. 3191
Grossman S. P. 4325
Grove S. M. 7470
Grover J. M. 7174
Groves S. E. 6311
Grozina A. A. 129 4917
Grubb D. T. 2491 8733
Gruber F. 4626
Gruber M. B. 4174
Gruber W. 245
Gruenthaler K.-H. 11
Gruenwald M. 7103
Grundell P. 7086
Grunewald W. 6028
Grycmanski M. 7854
Gryte C. C. 4686
Gsteu M. 4939
Gu H. 5030 7411
Gu J. 3854
Gu L. 8108
Guanghue W. 6662
Gubanova O. K. 8095
Gubina S. M. 4403 4406
Guelec B. 2328
Guenduez G. 1083
Guenther A. 5127 5276
Guenther W. 2733
Guerin P. 4613
Guernsey L. 8893
Guess T. R. 1141
Guha S. B. 6868
Guillen J. G. 3284 8136
Gujar H. D. 8838
Gully R. L. 7483
Gulrajani M. L. 4155 4440 5184 6824
Gulyaev L. S. 4918
Gulyamov T. 8172
Gundermann B. 3693
Gunduz G. 7826
Gunji T. 1353
Gunn T. S. 7164
Gunston R. 7112
Guo Y. 8267
Guobiao J. 4055 6424
Guosun Sh. 2588
Guozong Q. 5704
Gupta B. D. 805 3628
Gupta B. S. 4040 4373 6063 6066 6076
Gupta C. B. 7648
Gupta K. 1521
Gupta R. P. 2400
Gupta S. R. R. 34
Gupta V. B. 5699
Gupta V. P. 3488 6722 6723
Guram D. 8665
Gurel L. M. 6416
Gurevich T. M. 191
Gurtler H. 1103
Guse R. 6351 6985
Gusev B. N. 128 4146 4662 4940 5463
Gusev V. Ye. 363 5102
Gushchina L. Yu. 5163
Gustafson J. H. 480 863
Gustafson R. R. 7480
Guthrie D. W. 8038
Gutknecht J. 3214 5454
Gutmann R. 4028
Gutowski T. G. 4337 4340 6012
Guzzinati M. G. 1531 4045 4786 5538 5822 6831 6920 7885 8537
Gygli W. 1222
Ha W. S. 89 825
Haas A. M. 987
Haber H. 719 799 2005 2279 2835 3119 3688 3689 4714 5341 5343 5347 5425 5426 5429 6175 6963 6969 7139 7140 7670 7741 7867 8777 8780 8781
Haber R. 1845
Habib A. M. 4421
Hadano S. 4457
Haddad C. 2955 3033
Haddouch K. 7305
Hadimani V. V. 283
Haefely H. R. 4771
Haenisch M. 3535
Haeussermann E. A. 6232
Haeussler F. H. 5053
Haeussler W. 5910 5967
Hafer S. 5479
Haft P. 5478
Hagedorn F. 2583
Hagege R. 3134
Hagewood J. F. 8236
Haggag K. 1924 6901
Hagin G. 6823
Hagiwara I. 8365
Hagiwara M. 292 1959
Hahn B. P. 3919
Hahn H. 4790
Hahn H. T. 6323 6543
Hahn P. 4031
Haichun T. 2234
Haigh J. 4234
Haile W. A. 1792 6061
Haiquan Z. 5456
Hake B. P. 7087
Hal G. H. 686
Halasz G. 8300
Halbich R. 3551
Hale G. 4599
Hall M. 8587
Hall M. K. 1505
Hall R. W. 707
Halliburton J. B. 2824
Halliday L. A. 8565
Halliwell A. 6053
Halliyal V. G. 5128
Halse Y. 6771
Hamada H. 1085 3520 6746
Hamada Y. 8570
Hamanaka H. 8503
Hamill J. 2335
Hamilton C. J. 6058
Hamilton J. 6776
Hammers I. 4488
Hammersley M. J. 8447 8448 8745
Hamza A. A. 897
Han G. H. 3854
Han W. 8198
Han Y. M. 6323
Hanada K. 6225 6226
Hancock M. D. 1749
Hancox C. 2887
Hancox N. L. 3983
Hanganu L. 1700
Hanganu V. 8163
Hanisch M. 8135
Hanix Z. 7849
Hanjin W. 227
Hanks D. E. 1802
Hannay N. B. 7859
Hanquan S. 746
Hanrong R. 133
Hansen E. F. 7281
Hansen L. A. 7788
Hansen S. M. 8043
Hanson J. 300
Hanxin J. 219
Hanxin Z. 5652 5716
Haojing Y. 1635 4819 5645 5706 7802
Hapiette M. 3135
Hara K. S. 8870
Harada T. 3037 8632
Harakawa K. 7811
Harbatkin L. 327
Harber P. J. 1301
Harding P. W. 7669
Harding V. A. 1580
Harding W. A. 8213
Hardisty D. 2441 2442
Hardt K. 8256
Hargitai E. 3938 7903
Hari P. K. 173 983 4946 6640
Harker C. 6917
Harley L. 1779
Harlock S. C. 6352
Harmel B. 3713
Harmon L. K. Jr. 8769
Harnett P. R. 2438
Harold R. W. 1460
Harpell G. A. 4380
Harper R. J. 380 479 2782 3530 4495 6144 7590
Harper R. J. Jr. 1298 2764 7391 7646
Harper T. 1130
Harrell R. J. 1349
Harrington P. E. 4822
Harris B. 1870 3857
Harris C. E. 6311 7846
Harris E. E. 2071 3745 5521 6992

Harris K. 3687
Harris P. 8651 8652
Harris P. W. 2768
Harrison D. 6521
Harrison P. 1466 7268
Harrowfield B. V. 116 4072 8561
Hartlein R. 1344 3176 4508
Hartlein R. E. 2125
Hartley K. R. 8548
Hartley M. C. 7768
Hartline S. D. 1078
Hartmann U. 5581 6410 7234
Hartness J. T. 6306
Hartwig S. 3255
Harverd A. 7172
Harvey D. 2085 2102 3760
Harvey-Jones J. 2272
Harwood R. J. 7550
Hasegawa H. 2763 6943 7571
Hasegawa J. 1007 2580 2581
Hasegawa S. 8675
Hasegawa Y. 3232 6225
Hasenclever K. D. 2858
Hashiba T. 8918
Hashimoto I. 5279
Hashimoto K. 8727
Hashimoto T. 8433
Hashimoto Y. 2701
Hashin Z. 6322
Hasko G. H. 7463
Hasler R. 3623
Hatakeyama H. 2492
Hatta H. 6007
Hauers L. 198
Haumovich S. V. 5373
Haurtmann J. 404
Hausmann M. R. 6779 7789
Hauville M. 5619
Havas V. 1788
Havinoviski M. 6967
Hawn K. 911
Hay E. J. 3865
Hayakawa K. 5717
Hayashi J. 8915
Hayashi K. 1074 4468
Hayashi S. 4870
Hayashi T. 69 70 769 2472
Hayashi Y. 1074
Hayasi K. 6854
Hayes J. 1416 2168
Hayes J. F. 6314
Hays W. 4645
Hayward B. 8345
He G. 8740
He H. 5709
Head A. 5093
Heald T. 3860 3862 6918 7625
Heap S. A. 5452
Heape V. 1746 3820
Hearle J. W. S. 978
Hebeish A. 2223 2704 5152 6142 6929 7588 8553
Hebert J. J. 15 6473
Heckett E. 1303
Heddell P. 2225
Hedlund A. L. 1400
Heeger A. J. 5713
Hefti H. 3664
Hegazy H. 1895
Heger R. 1666
Heidan K. 3667
Heidel P. 8085
Heidemann G. 4501 4656 4696 6953 8562
Heikinheimo R. 7794
Heinl R. 3536 3874 3881
Heinrich A. 7592
Heinrichs G. 2613
Heinrichs T. 2282
Heintz C. E. 8857
Heinze K. 3498
Heise W. 8516
Heitmann D. 1452 3823
Heitmiller R. 1153
Heitmiller R. F. 1067 5697 6341
Helfrich B. 2328
Helgesen S. C. 8860
Helmstaedter E. 3980
Hemann J. H. 7507
Hemker D. J. 2485
Hemmpel W.-H. 2295 3552
Hempel T. A. 1397 8654
Henderson S. 1000
Hendler J. 5973
Hengjian L. 667
Henn M. A. 1372
Hennessey T. 1632
Hennion J. C. 6422
Henrat P. 1870
Henry H. 8454
Henzi B. 3623
Heptinstall M. H. 2385
Herlinger H. 2798 3666 4054 4470 4491 4492 8443
Hermann W. 6975
Hernson D. 6038
Herrburger P. 7253
Herrera C. G. 1906
Herrmann A. 3428
Hersh S. P. 7282
Hertz E. 1020
Herzog W. 6345
Hes L. 1456 6752
Hess K. M. 8904
Hesse R. 6271
Hessert K. 3198
Hester R. E. 3042
Hester S. B. 6416
Hetzer R. 7256
Heusser A. 3437 3867
Hextall P. C. 1941 2750 5222 5223 6115
Heya N. 996 2570
Heydt D. L. 2611
Hickman W. S. 7046
Hiei S. 26
Higazy A. 2704 5152 7588
Higel J. 5416
Higuchi M. 324
Higuchi Y. 7843
Hihara T. 443
Hildebrand B. 763
Hildebrand D. 3621 4451 6872
Hildebrand H. 4458
Hilden J. 2710 2777 3986 5244 6235 7603
Hildmann H. 3535
Hillestad C. 7374
Hillig J. 7778
Hilolayev S. D. 5035
Himeno T. 5279
Hine P. J. 8427
Hinkle D. 7052
Hinkle G. 2565
Hinkley J. A. 8678
Hinnen E. 1222
Hintermann K. 3136 3139 3140 4737 4738 6370
Hioka N. 460
Hirabayashi K. 1622 3232
Hirai A. 917
Hirai H. 8070 8134
Hirai I. 1353
Hirai T. 996 2570
Hiramatsu T. 4101
Hirani J. A. 7173
Hirao K. 7526
Hirayama A. 1375
Hiromitsu K. 6924
Hirotsu T. 1962 7083
Hirschler R. 1976 8359
Hirt P. 4054 6553
Hirte R. 8102
Hisaka N. 7074
Hloch H.-G. 3950
Hmurcik L. V. 6308
Ho C. H. 8118
Hoa S. A. 3985
Hoborn J. 1106
Hochgrebe R. 3141
Hodgkinson J. M. 7344 7488
Hoecker H. 4771 7998
Hoener C. 2975
Hoenig J. L. 7297
Hoepel W. 3507
Hoeppener R. 4634
Hoffmann F. 411
Hofmann D. 8100
Hogan J. 1056
Hogan S. 304
Holden D. W. 270
Holland N. 3024 6258
Hollay E. 1309
Hollen N. 7258
Holliday T. 1043 2494
Hollies N. R. S. 3839
Holm T. A. 6778
Holmberg R. A. 8644
Holme I. 1176 1183 1186 1220 1237 1424 1466 1512 1542 2314 2756 2766 3093 3637 4743 4986 6844 6855 7553 7981
Holt L. A. 3752
Holtappels H. 4774
Holtz R. D. 7157 7774
Holz I. 3791
Holzem R. 2461
Holzwirth P. 6979
Horn M. 5677
Homoelle T. 4398
Homutescu J. 3307 8112
Hon D. N.-S. 7989
Honegger J. 5493
Honeycutt M. L. 8691
Hong S. H. 6004
Hong S. I. 79 86
Hong Z. 27 5715
Hongbo G. 201
Hongguang D. 1465
Hongu T. 769
Hongxing Y. 139
Honigsbaum M. 1560 1563 1570 1573 1575 1578 2342 2348 2363 3162 3164 3166 3172 4509 4776 5569 6414 6415 7228
Honnigford L. 4300 4622
Honorati G. 8215 8426
Honra V. B. 8838
Hori T. 3248
Horii T. 6114
Horikawa A. 2486 3043 4870 8127
Horikawa S. 7366
Horino T. 1085 2037 2040 3520 6746
Hormann H. 1022
Horn J. C. 659
Horvatic M. 1707
Hoschke B. N. 7813
Hosokawa J. 7366 8166
Hosonaga K. 6226
Hostek S. 5386
Houfek W. E. 1890
Houlihan M. F. 3029
Hoult B. 8908
Householder K. A. 5978
Howard T. 5430
Howley P. S. 2411 7929
Hribek B. 8258
Hristescu E. 3218
Hristov H. A. 4876
Hrivnak D. 7116
Hsu L.-H. 380 398
Hsu S. E. 4332
Hsu W. N. 1945
Hu P. 5709
Hu W. 1622
Hua V. M. 6586
Huaide Y. 6373 7896
Hubal H. 328
Hubner K. 46
Huchzermeyer C. H. 2230
Huddar S. N. 7199
Hudson J. 1461
Huebner K. 1967
Hughes D. 367
Hughes D. W. 6451
Hughes F. 5348
Hughes F. H. 3707
Hughes K. J. 8761
Hughs S. E. 6438 6441 7997
Hughson G. W. 8907
Huifen J. 71
Huizhen W. 1923
Humm G. D. 1541
Humphrey D. N. 7763
Hung C.-C. 1829 7498
Hunt R. W. G. 1198
Hunter D. 6515
Hunter L. 1719 1721 2426 3044 3046 3238 3389 6582 7058 7550
Hunter O. F. 7056
Huntoon R. 8967
Huntoon R. H. 1796 6742 7251
Hunyady Z. 4756
Huppertz M. 2081
Hurdle J. R. 4335
Hurwitz M. D. 1922
Husain R. 8944
Hussain M. 7280
Hutter J. R. 1601
Hwang C. F. R. 7350
Hwang D. G. 4332
Hwang S. S. 86
Hwu B.-L. 7531
Hyer M. W. 1143
Hylla G. 3705 6180 6977 7682
Iannelli P. 3288
Ibrahim M. 5229
Ibrahim N. 6901
Ibrahim N. A. 1924 3608 6142 7593 8513 8543
Ichikawa M. 5282
Ichimura T. 918
Icsey M. 8298
Ida T. 5282
Idaka E. 1228
Iemoto Y. 166 4982 8198
Ignasiak B. 4203
Ignatenko R. A. 4975
Iguchi Y. 5286
Igwe G. J. I. 6030
Igwe G.-J. I. 1097 1167
Ii T. 1650
Iida T. 1180
Iijima T. 418 449 5218
Iizuka E. 8003

Ikegami M. 7844
Ikegami N. 8612
Ikeuchi H. 917
Ikutani Y. 8503
Ilceva R. 4441
Ilin S. N. 5200
Ilvutkina L. P. 147
Imada K. 4003
Imai K. 8503 8504
Imai Y. 914 921 5659
Imai J. 1458
Imam T. I. M. H. 7277
Imaoka H. 3060 7073 7074
Immirzi A. 3288
Imoto M. 5275
Inagaki H. 838
Inakgaki N. 7548
Inaki H. 1074 5108
Inamdar A. P. 7068
Indictor N. 4823 5474 7283
Infante M. R. 2783 2795 3553
Inies G. 5570
Innes R. 1032 1034 1035 1038 1524 1711 2602 6974
Innocenti R. 5528
Inoue H. 8455 8503
Inoue S. 5515 8503
Inoue T. 5291 8068 8117
Inoue Y. 3654 7080
Inui S. 3060
Iodkauskas I. A. 200
Iohara K. 1661 6552 8111
Ionescu M. 3965
Iordache R. 1727
Iordanescu E. 8723
Iovieva M. M. 55 4839 4858 4883 8030
Ipatov A. M. 4089
Ireland D. R. 7243
Irklei V. M. 5542 7318 8460
Isaacs M. 1791 2239 2240 2270 2503 2627 2628
Isaacs M. III 156 3224 5769 8828 8835 8839
Isachenko R. N. 4236
Isaji S. 1422
Isamailova V. A. 484
Ishai O. 2641
Ishida H. 6733 7297 7298 7338
Ishida T. 1013 2319 7877 8840
Ishiguro Y. 8551
Ishihama T. 8803
Ishii K. 1966 8129
Ishikawa S. 1437 1439
Ishino S. 5678
Ishitani A. 7207
Ishiwatari T. 1927 3652
Ishizaki S. 8698
Ishizuka O. 1664 6509
Ishtiaque S. M. 2522 6573 8693 8703
Islander M. 4526
Ismail G. M. 2720
Ismakova V. I. 3966
Isono T. 6943 7571
Israilov Sh. Ya. 4974
Issa Y. M. 4467
Issler R. 3888 4705 8771
Istrate M. 1921
Istre J. 3030
Itami M. 1085
Ito A. 1859 7077
Ito H. 292 838
Ito K. 577
Ito M. 8597
Ito T. 6924
Itoh K. 1228
Itoyama K. 7323
Ivan C. 1811
Ivanauskene A. A. 391
Ivancevic L. 7150 8812
Ivannikov V. L. 736 5524
Ivannikova G. I. 5406
Ivannikova I. M. 5306
Ivanov D. G. 5131
Ivanova I. N. 3392
Ivanova L. A. 476 4831
Ivanova T. I. 170
Ivanovo G. V. 4374
Ivanovo N. N. 4483
Ivanovo O. M. 4272
Ivanovo T. N. 5530
Ivashova V. A. 8219
Ives P. J. 4073
Ivkina T. M. 8913
Ivoilova N. I. 5449
Iwadare Y. 6880
Iwanczik I. 3833
Iwasaki K. 8612
Iwasaki M. 1446 1449
Iwasaki Y. 3520
Iwata Y. 2327
Iwatsubo T. 8392
Iwatsuki M. 2472
Iyengar Y. 2691 5999 6714
Iyer B. V. 5599
Iyer C. 267 2530 2612 3384 3455 5154 6417 8647
Iyer K. R. K. 2541 2547 5604
Iyer S. B. 1684 3299 3309 3310 6547 7197 7352 7660 8046 8128
Iyer S. L. 4344
Iyer S. R. S. 416 4442
Iyer V. 8137 8138
Jaala U. 4386
Jaccobsen M. 8422
Jackson A. 8731
Jackson D. 7735
Jackson J. W. 3453
Jackson K. C. 1372
Jackson R. L. 2768
Jackson S. G. 6458
Jackson W. J. 3297
Jacob M. 583 1425 1585 1836 2940 3960 6754 6758 7516 7517 7518 7967 8384 8385 8635
Jacobs B. 5579
Jacobs B. A. 7951
Jacobs R. R. 8887 8895
Jacobsen M. 1149 1155 1169 1668 1853 1882 1884 2615 2620 2954 2956 2958 2962 3036 3103 6621
Jacques P. 1939
Jacumin E. 694
Jadeja V. 6354 8260
Jaecklin F. P. 7842
Jaffe M. 4048 8124
Jagusiak M. 1852
Jahagirdar C. J. 6945
Jahn W. 1773
Jain A. K. 1245 2776 3647 6600 6829
Jain M. K. 8015 8017 8025
Jaisun L. 1005
Jaiswani O. P. 1004
Jakes K. A. 7795 7955
Jakob H. 3623
Jamadagni R. 8450
Jamdagni R. 7582
Jamieson R. G. 4022 8005
Jamison E. R. 8465
Janakiram G. 8180
Janas V. F. 4323 6745 8375
Jancsik G. 8210
Janeiro J. 8673
Jang B. Z. 4331
Janicka J. 8671
Janiszewski A. 5512
Jankiraman K. P. 6846
Jarecki L. 6517
Jarniewicz R. 956
Jarrett P. M. 7764 7783
Jarrigeon M. 4609 6077
Jarvie D. A. 4674
Jarvis C. W. 694 2263
Jasinowski J. J. 3190
Jasper J. 5365
Jatkar P. R. 1625
Javor E. 7782
Jay S. L. 680
Jayachandran K. 8797
Jayant M. R. 450 452
Jayasinghe S. 4673
Jazwicki R. 137 4904
Jederan M. 3451 8254
Jedrzejczak M. 2395
Jeler S. 3582
Jellinek G. 4501 6953 8562
Jemec L. V. 5679
Jenkins E. L. 850
Jenkins H. 1092 1173 1576 1577 2659 2660
Jenkins J. J. 8051
Jenkins M. 1496
Jenner D. 4589
Jennings T. 7932
Jensen P. S. 7286
Jergus P. 4394
Jerina K. L. 6543
Jermolowicz P. 7529
Jernigan D. A. 4765 8851
Jeronimidis G. 6044
Jeroy J. 4542
Jesic Z. 64 4033
Jester R. 3989
Jeter K. F. 594 2961
Jezek H. 4297
Jeziorny A. 4351 4357 4359
Jhala P. B. 8830
Jiahua L. 314
Jian-hua M. 440
Jiangyong L. 1925
Jianliang X. 2502
Jianping X. 2566
Jiaqin K. 5709
Jiasun L. 2578
Jie W. 7389 7395
Jiemin Z. 5650 7357
Jihue C. 759
Jin C. M. 87
Jin F. 7368
Jin G. 5731
Jin Y. 874 6301
Jinda T. 884 5711
Jindal B. M. 6600
Jinen E. 8424
Jingxiao H. 682
Jinqu L. 6381 7380
Jinwen L. 188
Jirman J. 441
Jirsak O. 1810 6752
Jisa M. 4297
Jiying X. 663
Job M. 385
Joblonska-Grzelak E. 642
Jochawicz A. 4503
Jocic D. 1750
Jogdev A. G. 5754
Johnson C. C. 4673
Johnson C. M. 8860
Johnson D. 2022
Johnson D. J. 6510
Johnson D. W. 7533
Johnson E. 6137 6515
Johnson G. C. 1546
Johnson J. S. 7739
Johnson N. A. 2515
Johnson R. 3068
Johnson R. H. 2268
Johnson R. W. 5660
Johnson S. A. 1144
Johnson W. S. 1082
Johnston A. M. 8907
Johnston D. B. 2262
Johnston J. E. 8925
Johnston M. L. 5979
Joko K. 2753
Jones A. D. 8907
Jones B. 4583
Jones C. 1797 2819 8509
Jones C. D. E. 1267
Jones D. 475 1665 8584
Jones L. N. 8689
Jones S. 5342
Jones S. H. 5485 6199
Jones T. L. 7905
Jones T. S. 8884
Joo C. W. 140
Jose D. J. 3839
Joseph G. 7041
Joseph M. L. 792
Joshi A. 7122
Joshi D. H. 8729
Joshi D. N. 8622
Joshi G. 8450
Joshi P. S. 8838
Jouve P. 7836
Jovanovic M. 6421
Jovanovic R. 7307
Joyce M. K. 670 4591
Joyner M. M. 8552
Jozavi H. 6009
Jozwiak K. 240
Jozwicki R. 120 121 143
Judea M. 1920
Julia C. 5752
Julia M. R. 2783 2795 3553
Julia R. 4824
Juming W. 1913
Junbo W. 717
Jung R. 2837 6186
Jungman D. 2228
Jungmichel H. 4350
Junqian W. 146
Jupina M. J. 7412
Jurenak A. 5078 5080
Juszczyk J. 1773
Kabina P. 6774
Kabra R. S. 3631 7199
Kachukhasvili N. I. 5294
Kacperczyk P. 4904
Kacziela J. 149
Kaczmarska H. 8408
Kaczmarski F. 8873
Kaczorowska M. 1819
Kaddar T. 1744
Kadenatsy L. A. 4749
Kadikis A. 1442
Kadolph S. 4795
Kadolph S. J. 7258
Kadontseva T. I. 102
Kadurina A. Ye. 5118
Kadyrov K. 5298
Kagawa Y. 6743
Kagayama K. 688
Kai S. 471
Kaiser D. 4666
Kaivola H. 4987
Kajiwara T. 8503 8504

Kakimoto M. 5659
Kakimoto M.-A. 914 921
Kako T. 3653
Kakuta Y. 6916
Kalashnik A. T. 4884 8031
Kalashnik V. Ya. 4680
Kalbe J. 7998
Kalberg S. R. 8904
Kalenkov A. B. 5530
Kalina O. N. 319
Kalinin Ts. I. 4090
Kallo D. 8359
Kalman A. 729
Kalmykov G. V. 553
Kalontarov I. Ya. 422
Kalousek Z. 1810
Kalugin N. V. 5122
Kalyanaraman A. R. 3047 4140 5813 6575 7190
Kalyanova N. F. 3247
Kalyuzhnaya R. I. 6803
Kamaishi T. 8365
Kamata Y. 1859 7077
Kamber A. 390 5252 6108 7609 7628 8572
Kamel I. 982
Kamel I. L. 4348
Kamide K. 1637 1638 5558
Kamigaito O. 6005 8371
Kaminski E. 4732
Kaminskii V. N. 7337
Kammerer P. 344
Kampf Q. L. 6056
Kampl R. 145 3325
Kanakova L. V. 4407
Kanazawa S. 7366
Kanchaveli O. L. 123
Kandiah R. P. 7483
Kane C. D. 6638
Kang T. J. 79 1720 7933 8203
Kann P. 4638
Kannappan L. 1471
Kanno E. 2686
Kantner G. C. 8352
Kantouch A. 6273
Kaoperczyk P. 121
Kapadia N. K. 4433 7587
Kapeckas J. 478
Kaphahn W. 3679
Kaplan D. B. 7731
Kaplan D. L. 7710
Kaplan S. L. 4309 6716
Kappeler H. 5838
Kapustin V. P. 4490
Kar S. N. 2428
Karaba J. 2045
Karabayev A. A. 484
Karabayeva V. D. 485
Karaca S. 2328
Karacsonyi Gy. 4897
Karacun J. 4633
Karameseva M. 3337
Karamyshkin V. V. 7170
Karauchi T. 6005
Karchmarchik O. S. 3296
Kardos J. L. 7505
Karfunkle R. D. 2381
Karger-Kocsis J. 290 7828
Karimova Sh. H. 8010
Karmaker S. R. 4462
Karmarkar S. D. 6004
Karn R. 2425
Karnaukh Ye. M. 284
Karnon I. 1705
Karol M. 3001 8866
Karol M. H. 8853 8872 8879 8898
Karpavichene L. A. 391
Karpov V. V. 5166
Karrer J. 8316
Karthikeyan S. 6570
Kasai N. 23
Kasevich I. R. 4858
Kashiwagi M. 7616
Kashiwagi R. 5559
Kashiwamura T. 1438
Kashouti M. A. 6929
Kasparek J. V. 4932
Kasprzak H. 4877 4888
Kasradze L. I. 5192
Kastelan-Macan D. 4670
Kasten M. 1246 2420 2820 2840 3706 5269 5351 5352 5821 6166 6233 8508 8544 8601 8778 8791
Kasturiya N. 1258
Kaszynski L. 1068
Kataoka S. 8068
Katayama A. 3653
Katholing G. 2163
Kato H. 5219 6882 6932 7647 8456
Kato K. 2039
Kato T. 1859 2327 7077
Kato Y. 1781 8803
Katon J. E. 7795
Katovic D. 1912 8557
Katre R. A. 1262
Kaufer H. 7311
Kaup H. H. 3271
Kaushik R. C. D. 967 983 4946 5811 6078
Kautz H. 7507
Kavaska K. 5105
Kavesh S. 4059 8121
Kavia Z. D. 1624
Kawabata N. 82
Kawabata S. 1007 2580 2581
Kawachi J. 1435
Kawaguchi H. 1619 6475
Kawai H. 1446 8377
Kawai N. 8591
Kawakami M. 1384
Kawamoto E. 7016
Kawanishi S. 2040
Kawarai M. 1781
Kawasaki K. 8016
Kawase S. 6238
Kawase T. 671 6277
Kawashima S. 3037
Kawsaka K. 1638
Kazantseva L. B. 5469
Kazil O. P. 4620
Ke-giang C. 440
Keaton J. 409 1213 7584
Kebea R. 8347
Kedrovsky B. G. 4534 6980
Keenan N. J. 8878
Keer J. G. 3514
Keesee S. H. 681 3849
Keighley M. 5613
Keinig D. G. 8875
Kellas S. 7503
Keller G. E. 8891
Keller M. 1410
Kelloniemi E. 4386
Kelly J. J. 1196
Kempl R. 6590
Kenig H. 202
Kenigsberg Y. 8643
Kenins P. 7483
Kenter C. J. 7761
Kentours C. 3769
Kepka S. 4047
Kerawalla J. N. 8043
Kerimov S. G. 178 195 214 231
Kerimova S. G. 216
Kern R. 3618
Kerr N. 7932
Kerr P. L. 4042 7404
Kershaw N. J. 8214
Kertesz I. 3915
Kerzhevtsev V. A. 199
Keshishyan Kh. Sh. 4997
Kessels K. H. 1003 5016 6659
Kessler P. N. 4163
Kessler S. L. 7243
Keys B. 5399 7004 7700
Keys W. 576 5315
Kezdy A. 4429
Khachaturov V. A. 4198
Khadye N. B. 8388
Khairullina L. A. 8172
Khakimova A. Kh. 52
Khalil E. M. 2223
Khalturinsky N. A. 322
Khan S. 4305
Khandelwal M. 7025
Khandeparkar V. G. 3929 3930 3931
Khanin Z. S. 7324
Khanina I. I. 5163
Khanna R. 8583
Kharchenko E. F. 7333
Kharchenko L. F. 4767
Kharti M. I. 4240
Khavtov S. N. 214
Khay M. 7772
Khazanova A. S. 4965
Khisamova O. V. 4499
Khizhnyak L. G. 37
Khlomenok V. N. 4999
Khodyrev V. I. 5168
Khodzhiyev M. T. 4912
Khokhlova V. A. 80
Kholod V. P. 672
Khomyak N. Ye. 672
Khorovodnov G. S. 4965
Khozina Ye. N. 4204
Khozova L. M. 5238
Khripin A. G. 664
Khrustalev R. S. 7158
Khudoshev I. F. 4882
Khudova L. N. 4981
Khudykh M. I. 119 4902
Kia H. G. 2645 8333
Kidron M. 4321
Kienbaum M. 8596
Kiesche E. S. 5655
Kiesling H. 7644
Kikhachev P. P. 5524
Kikuchi M. 1232
Kikuchi T. 6497
Kikutani T. 3263 7347 8047
Kilikova M. A. 5220
Kille R. 3732
Kim B. C. 86
Kim F. A. 4559
Kim J. H. 825
Kim K. H. 88 489 4686
Kim K. J. 1673
Kim K. S. 103 453
Kim K. Y. 825
Kim N. N. 5557
Kim N. S. 456 1944
Kim S. H. 456 1944
Kim S. K. 79
Kim S. Y. 87
Kim V. P. 3264 4845
Kim Y. H. 1658
Kimberlin R. L. 3682 6973
Kimmel L. B. 8173
Kimur T. 2570
Kimura -. 3308
Kimura M. 1209 1958 3654 8493
Kimura T. 996
Kimura Y. 918
Kinari T. 7381 8577
King B. 1667
King J. C. 694
King R. L. 3983
King W. D. 4485 7392
Kinn L. L. 6281
Kinoshita M. 1403 2701
Kinoshita Y. 6947
Kinosita M. 5464
Kinosita Y. 6854
Kinsler M. R. 6308
Kinsley K. B. 8875
Kipp H. W. 2583
Kirberg K.-W. 3408
Kirby J. 7702 7709
Kirillov Ye. A. 415
Kirillova M. N. 486
Kirkina L. I. 5302
Kirschbaum R. 6538
Kiseleva N. B. 242
Kiseleva V. M. 5372
Kiss G. 8300
Kissel W. 600 609 1274 1317 2804 2903 2922 3781
Kitamura A. 7083
Kitano M. 1180
Kitano T. 5687
Kitao T. 7926 8520
Kitayama T. 62
Kitchen K. E. 5109
Kitutani T. 882
Kiyashko A. V. 4840
Kiyotsukuri T. 919 6386 8918
Klapper M. 40 895 924 3883 3955 4801 4815 8779
Klare H. 5681
Kleber R. 5635 8546
Klein L. 1273
Klein P. 5471
Klein W. 929 952
Kleinhansl E. 3052 3828
Klemm M. 3646 4473 8535
Klevakin V. N. 4198
Klichka V. 4190
Kliegl J. 265
Klimek B. 4459
Kliment L. 3465 7449
Klimova T. P. 172
Kline R. A. 6316
Klingenberger H. 2172
Klinger D. 1136
Klisvitch W. 1017
Klochko P. I. 4114
Klochkov N. A. 4089
Klose A. 2177
Klosowska-Wolkowicz Z. 3961
Klouda E. 2146
Kloyziyer Kh. M. 5595
Kluska A. 1733 4148
Klyakotko M. A. 6726
Klyavin' A. R. 4560
Kmieciak K. 4017
Knack I. 298
Knecht W. 3470 3471
Knez B. 2016 2017
Knight K. 5358
Knight P. 3158 8954
Knittel D. 2448 8558
Knobil H. 5047
Knobloch P. 5966 6786
Knopf K. 3630
Knott J. 4436
Knuth J. W. 1357
Knzgada V. Yu. 4356

Ko F. 1045 4302
Ko F. K. 4343 5959 7686
Ko S. W. 1658
Ko T. H. 873
Koban M. A. 4371
Kobayashi H. 2039
Kobayashi K. 2736
Kobayashi M. 1650 2457 6119 8495 8521
Kobayashi T. 688 1074 5332 8612
Kobert N. 8763 8764
Koblyakova Ye. B. 5406
Kobuke Y. 8365
Kobysheva O. G. 4864
Koch H. 3621 4451 4458
Koch R. A. 716
Koch-Muenchmeyer B. 3789
Kochura Yu. S. 96
Kocsis-Karger J. 3258
Koczak M. J. 982
Koczor Z. 8645
Koczy L. 3253 8822
Kodaka K. 1375
Koeditz I. 3484
Koehler K. 3827
Koehling A. 11
Koenig J. L. 6140 7298 7798
Koenig R. 11
Koerner R. M. 6777 7531 7930
Koestler R. J. 4823 7283
Koga J. 2753
Kogan A. G. 4927
Kogan E. G. 4891
Kogan Ye. M. 4163
Kohata K. 8377
Koike A. 7549
Koine T. 6854
Koizumi Y. 8803
Kojima K. 4870
Kokish M. I. 150 4117
Kokorin O. Ya. 4739 5531
Kolb A. 660 8720
Kolb M. 7179
Kolesnikova Ye. N. 5052 5054
Kollerov Yu. K. 208
Kollu T. 1713
Kolodziej T. 1469 4001 4009
Kolomiets S. N. 7300
Kolomiyets I. D. 4614
Kolycheva A. A. 4439
Komarov V. B. 8029
Komarov V. G. 5461
Komarova G. V. 232
Komarova T. A. 4205 5029
Komives M. 5366
Komives M. D. 1283
Komorowska D. 4663
Kon Y. 1440 7811
Kon'kova M. B. 5334
Konda A. 8675 8706
Konda F. 8159
Kondo I. 2716
Kondo K. 8803
Kondo M. 1781 8803
Kondrat'eva V. S. 5449
Kondrat'yev V. S. 7170
Kondrat'yeva N. D. 5011
Kondrikova N. M. 4767
Konishi T. 26 1619 6475
Konkin A. A. 7354
Konodo S. 1353
Konomi T. 577
Kononenko G. P. 5238
Konopka A. 4359
Konoval V. P. 664
Konovaleva L. Ya. 4839
Konovalov A. V. 4829
Konovalova L. Ya. 4883
Kop'ev M. A. 8031
Kopias K. 8301
Koppens R. 6097
Koral T. 5323
Koranne S. M. 8474
Korchagin M. V. 5227
Korchinskaya M. A. 184
Korenyugina F. V. 761
Korger P. 7179
Koritskii K. I. 6588
Korneva A. T. 4052 5143
Korneva N. F. 5362
Korneyeva R. V. 1230
Kornilova L. G. 337
Korobanova I. A. 5265
Korobova V. F. 4146 5463
Korol' L. I. 533
Korostyleva Ye. Yu. 337
Korotkov B. V. 96
Koryagin Ye. P. 4170
Kos L. 4764
Kosarsky N. A. 5198
Koscielski S. 3144
Kosh K. 2280
Kosheleva M. K. 5310
Kosheleva O. N. 5412
Koshiba K. 8233
Koshida H. 4894
Koslowski H. 7330
Koslowski H. J. 2446 2482
Kosmo J. J. 7737
Kosova R. M. 7354
Kossina A. 145 3397
Kostina T. F. 8042
Kostornova O. V. 104
Kostromin V. P. 7300
Kostyleva N. Ye. 4731
Kosyachenko L. N. 4975
Kotani S. 5273
Kothari V. K. 5816
Kothe G. 65
Kotina V. Ye. 7354
Koukawa M. 996
Kourtides D. A. 5138
Kouyama S. 598 8629 8634
Kovacs A. 4746
Kovacs I. 3915
Kovalenko L. A. 5326
Kovalev G. D. 101
Kovalev V. A. 723 734
Kovaleva G. G. 144
Kovaleva G. V. 485
Kovaleva L. F. 5311 7591
Kovalevsky A. V. 5029
Kovylyanskaya Ye. V. 195
Kowalski J. 244 8970
Kowalski K. 1785 4141 4145 4253 4660 8295
Kowsaka K. 1637
Koyama K. 1664 6509
Kozich M. M. 315 5119
Kozierska K. 4015
Kozik P. P. 4680
Kozik Z. 211 1767 4211
Kozlov A. B. 5000
Kozlov B. A. 5371
Kozlov V. A. 3261
Kozlov V. S. 7324
Kozlova S. Ye. 5302
Kozlovskaya Ye. I. 4992
Kozlowski M. 3305
Kozyreva V. P. 4907
Krafchack T. M. 6314
Krainov V. K. 4886
Kralina I. M. 3296
Kramrisch B. 1189 2774 3663 5268 5280 5303 5312 6843 6876 6888 6891
Krasil'nikova L. S. 8073
Kraska J. 451 6907
Krasnoborodko A. Ye. 169
Krasnov E. P. 54 7329 7337
Krasovitskii B. M. 1907
Krasznai M. 8751
Krause H. W. 6658 7175
Krauth P. 4006
Kremer V. A. 4895
Kremer V. A. K. 3811
Krenzer E. 8199
Kreofsky T. 8903
Kretschmer A. 3578 3612 4408 5088 6130 6576 7562 7966 8514
Kretzer W. T. 8788
Kretzschmar U. 2287
Krichevsky G. Ye. 312 322 5220 5266 5555
Kriechevski G. E. 7591
Krigbaum W. R. 5707
Krishnamoorthy -. 7999
Krishnamoorthy S. 7278
Krishnamurthy V. 4348
Krishnan K. B. 6571 7377
Krishnan R. 450
Krishnan S. R. A. 7278
Krishnaswamy R. 3335 6566 8143
Kriyevinsh I. V. 5406
Kroezen A. B. J. 1182 7576
Kron P. 507 509 510 511 514 1374 3762 4513 7351
Kronfel'd A. M. 7334 8041
Kropf R. 3860 3862 6918 7625
Krucinska I. 1443 5729
Krucker W. 693
Krueger W. H. 4305
Kruesi A. H. 7463
Kruessmann H. 488 3730 3735 3738 3949 3950
Kruger O. 329
Krupnova M. I. 4829
Krupp S. 4289
Kruschwitz W. 490
Kruse F. A. 2044
Kruse F. H. 558
Kruse R. L. 7095
Kruse W. D. 8784
Kry S. 7856
Kryazhev Yu. G. 99 7922 8062
Kryhul A. 5566
Krylov G. A. 5025
Krylov V. V. 4079
Krylova G. A. 195 231
Krysko V. P. 6356
Kryuchkova O. V. 5306
Kryuchkova T. I. 527
Kryuhl A. 2934
Kryuk T. P. 104
Kryukov V. K. 482
Kryukova N. N. 7983
Krzeminska-Freda A. 2145
Kuatbekova L. K. 5406
Kubacki Z. 4489
Kubata M. 7378
Kubaytis Z. I. 200 317
Kubica H. 4963
Kubotsu A. 3279
Kuchczynska L. 4996
Kuchuashvili L. G. 123
Kuda V. 7418
Kudko L. M. 4552
Kudryashova N. I. 4499
Kudryatsev G. I. 4858
Kudryavin L. A. 234 4235 4621 5054 5506
Kudryavtsev G. I. 3296 4846 7299
Kudryavtseva G. V. 3811 4895
Kuehni R. G. 2227 7585
Kuepfer R. 5541
Kuhn M. J. 7690
Kuhnert G. 8321
Kujiko E. 4838
Kukharev M. S. 4088
Kuklinski A. 3876
Kukushkina S. A. 63 4829
Kukushkina Ye. V. 7064
Kulagina G. A. 8073
Kulagina M. I. 5500
Kuleshova V. I. 4275
Kulig L. 4994
Kulkarni P. P. 4462
Kulkarni P. R. 6429 6431
Kumar A. 1965
Kumar M. 6858
Kumar P. N. 8255
Kumar S. 8039
Kumar Y. V. 6869
Kumaraswamy C. 4344
Kumari M. S. 42
Kummerloewe C. 3298
Kun Z. 1708
Kundu A. B. 828
Kunkel K. 1426 3802
Kuno H. 7512
Kupchenko G. G. 5497
Kupryukhina N. V. 4115
Kuraksina Ye. N. 5052 5054
Kuramoto N. 8698
Kurashov Yu. I. 310
Kurata M. 7559
Kurauchi T. 8371
Kurdryavin L. A. 5052
Kurita Y. 8612
Kurkov V. V. 959
Kuropka R. 7998
Kurosaki S. 8159
Kurseitov S. 199
Kuryatnikov I. D. 5074
Kurz E. 2786
Kurz R. 4028
Kushko A. A. 5297
Kustova O. G. 4614
Kusumoto K. 8625
Kuszaj J. M. 749 8850
Kut'in Yu. K. 4170
Kutseba S. A. 8071
Kutter S. 871
Kutzhanova A. Zh. 5227
Kuwabara S. 5253
Kuwahara A. 984
Kuwana T. 7921
Kuz'mina N. L. 3811 3966 4895
Kuzmek B. 1900 1912
Kuzmina T. O. 4992
Kuznetsov M. S. 6155
Kuznetsov V. B. 5309
Kuznetsova G. B. 3296
Kuznetsova L. G. 51
Kuznetsova L. K. 3817
Kuznetsova N. A. 476
Kuznetsova S. Yu. 8062
Kuznetsova T. A. 4461
Kvartin L. M. 4193
Kwok W. K. 2691 5999 6714
Kwon Y. D. 4380
Kyaarik E. Kh. 5525
Kyono T. 1440
Kysela Z. 7853
Kyuma H. 1621
Laburenko Yu. A. 761

Lacey J. 7918
Lacey K. 1009
Lacey M. E. 7918
Lacrosse B. 1110
Ladyszhinsky S. I. 4678
Lagace P. A. 2684
Laget B. 2679
Laggan P. 1076
Lahaye M. 7317
Lahiri J. 7471
Lahiri S. B. 1625
Laibao G. 1978
Laier H. 7530
Laine J. E. 877
Laine R. M. 8055
Laing R. M. 1503 3128
Laird J. W. 6434
Lakos F. 702
Lalayan V. M. 322
Laletin A. I. 94
Laletina O. P. 92 94
Lalor W. F. 6441 7997
Lam R. C. 7505
Lam S. M. Y. 4320
LaMarche R. 2160
Lamb G. E. R. 665
Lamba A. 3766
Lambert A. H. 2764 6144 7646
Lamneck T. 798 1321 1325 2430 3294
Lamrell C. 5111
Lancaster Z. W. 1402
Landry J. L. 8881
Lang D. C. 4308
Lang R. W. 7310
Lange J. H. 8847 8902
Langemann M. 1041 2018
Langenbach E. 250
Langer M. H. 1243 1244
Langer R. 4118
Langer-Korsch S. 612
Langford A. L. 7258
Langton M. 2396
Lanin N. D. 3261
Lantai I. 7925
Lantschner J. 4793
Lantz R. C. 8894
Lapkina Z. L. 5473
Lappage J. 1259 1264
Lappen A. 8909
Lapshenkova V. S. 5310
Lapshina R. I. 4965
Lapteva Zh. P. 4369
Larntz K. 1356
Larson E. 998
Lartaut M. 7855
LaRussa R. 1579 3174 7235
Larzelere J. 5382
Lasorova R. 412
Laszkiewicz B. 4890
Lathrache R. 1099
Latimer D. 8356
Latimer J. J. 84 5963
Latteur B. 6153
Latysheva L. V. 4864
Latzke P. M. 5459 6271
Laube B. L. 4324
Laubsch K. L. 982
Laubscher H. 6329
Laubscher H. P. 7137
Laugale V. A. 242
Laughlin L. 1313 2009
Lauke B. 3518
Lauque D. E. 8871
Laux G. 3340
Lavielle L. 4265 8368
Lavoignet D. 3137
Lawless M. 2813
Lawrence C. 5789
Lawson J. B. 7100
Lawton P. J. 1170 1171
Layahe M. 5656
Laycock D. 5023
Lazar J. 1510
Lazar K. 2597 6691
Lazareva A. P. 5163
Lazarre G. 6957
Lazauskas V. Yu. 152
Lazovetskaya Zh. B. 5228
Lazrus A. L. 4683
Le Petitcorps Y. 5656 7317
Le-Khac B. 6016
Leach A. 1130
Leach D. C. 4317
Leadbetter P. W. 8484
Leaf G. A. V. 1502
Leahu P. 3207
Leal J. S. 8547
Leary R. H. 1909 2127 3611 5170 5171 5281 6629 7899 8613 8832
Leaver I. H. 3042 8007 8689
Lebedev G. O. 4739
Lebedev S. B. 5272
Lebedeva T. I. 3655
Lebedeva V. I. 4095
Lebioda J. 4478
Leblanc M.-A. 424
Ledbetter H.D. 8034
Ledbetter W. D. 3410
Ledheva N. A. 4444
Lednik V. F. 8095
Lee C. H. 474
Lee C. M. 427
Lee D. S. 1617
Lee E. X. 456
Lee G. 629 5430
Lee J. J. 1673
Lee J. K. 7933
Lee J. M. 389 474
Lee J. W. 6040
Lee J.-W. 7846
Lee K. 1085
Lee L. S. 816
Lee M. C. 1802
Lee R. L. 6288
Lee R. Y. 474
Lee S. 6315
Lee S. A. 5952
Lee S. Y. 4321
Lee S.-Y. 6010
Lee W. I. 1833
Lee W. J. 8730
Lee W. K. 2773
Lees J. K. 3511
Legare R. J. 6067
Legchilina L. M. 482 5306
Legedeva N. A. 337
Legotin P. N. 369
Lehman M. L. 7055
Lehmann G. 603
Lehmann P. 3543
Lehmann S. 4313
Lehnen A. 6250 6645
Lehner H. M. 8299
Lei C. 4343
Leifeld F. 4085 7155
Leilin X. 192
Leiying Y. 5646
Lemere L. F. 1751 2558
Lemneck T. 2972 3393
Lemstra P. J. 4064 4334 6538
Len'kov S. L. 56
Leng J.-P. 3175
Lenglet J. 7775
Lennox-Kerr P. 342 941 1466 1523 1536 1584 2302 2550 2584 2619 3148 3149 3151 3695 3940 4742 4744 4789 5781 6559 6560 6827 6955 7177 7897 8834
Lennoz-Gratin C. 7092
Lenten B. V. 2814
Lenz R. W. 7349
Lenzing AG. 98
Leon E. 7691
Leonte P. 8533
Leot'yeva I. S. 5294
Lepenye Gy. 1976 8359
Lepoutre R. A. 271
Leppin -. 5321
Leppin J. 495
Lerman Y. 7917
Leroy G. 8349
Lesiakowska K. 8670
Lesniewska D. 6773
Lessard L. 4330
Lessmann R. C. 3546
Lesykova E. 3987
Letkov N. L. 5074
Lettich J. 1379 1381 2875 3123 4013 4598 6198 6237
Leumer G. 7060
Leung C. L. 1048 4326
Levan C. D. 8035
Levene R. 2730
Levin V. M. 7300
Levit S. 3880
Levitsky Yu. Ye. 5360
Lewinski J. 4207
Lewis A. F. 7316 7542 7543 7814
Lewis D. M. 2720 3662 7086 8007 8878
Lewis K. 1370
Lewis M. 8934 8938
Lewis S. E. 4239
Lhote F. 6059
Lhymn C. 6304
Lhymn Y. 6304
Li C.-T. 4875
Li F. 8028
Li G. 8108
Li H. L. 4380
Li R. 6387 7924
Li T. 2457
Li W. 4267 6717 8203
Li Y. 8699
Liang Z. 394
Liao T. T. 4326
Libkind R. M. 5228
Lichstein B. M. 7971
Lickfield G. C. 6013
Lieberenz K. 7778
Lieberman M. A. 6444
Lieberman R. J. 7915
Liebscher U. 1780
Liekweg D. 7870
Lieu Y. 8177
Lihua H. 5715
Lilani H. N. 4345
Lili Z. 289
Lilis R. 7917
Lim Y. J. 427 1651
Lima M. 8794
Liming W. 5873 7419
Limmin Q. 6630
Lin C. H. 873
Lin L. C. 4308
Lind J. A. 4683
Linde G. 7771
Lindeen G. 1738
Lindemann T. 8661
Lindenmeyer C. R. 8765
Lindley J. A. 5448
Lindquist J. 8951
Lindsay P. 7947
Link D. 5257 6913
Linow K.-J. 915
Linville R. J. 4466
Lipkova N. P. 157
Lipowitz J. 4655
Lippman P. R. 2070 5479
Lis A. 4994
Lishan D. G. 2768
Lisovskaya I. A. 224
Lisyakova G. V. 4839
Liszonyi Z. 815
Litevchuk D. P. 316
Litevchuk L. P. 4358
Litovchenko G. D. 8042
Little T. 557 721 3463 5094 5364 5526 6350 6530 6767 8598
Little T. J. 7098
Litvinenko N. P. 534
Litvinsky A. N. 5498
Liu C. K. 5707
Liu D. 7493
Liu J. 8028
Liu J. M. 1463
Liu R. H. 690 2794
Liverant V. L. 5326
Livshits R. M. 7314
Ljungquist O. 3304
Lloria J. 1291
Lloyd B. 1484 1533 2008 2419 2479 2591 2810 3110 4507 5112 5509 6686 6964 8759 8799
Lloyd T. 2147 2892 4612
Lo T. Y. 2218
Lobikov D. M. 4546
Lobova L. V. 5329
Lobrano A. 610 1314 1315 2092 2094 2896 2905 2906 2908 2909 2911
Lock J. 6724
Lockett L. 7769
Lockwood L. 618
Loebel W. 3272
Loecker R. 4519
Loeffler F. 1104 1105
Loepfe E. 7879
Loerner R. M. 6771
Logacheva L. I. 5285
Logan T. M. 8904
Loginova N. N. 7334
Logsdon A. 1405
Lohnert W. 6120
Lokhande H. T. 6523
Lokshina I. V. 51
Loleit H. 8795
Lolenko I. Z. 3261
Lomax G. R. 1683
Lombardi V. J. 7454
Long M. 1829 7498
Longdi C. 4899
Longgui T. 768
Lopandina S. K. 5361
Lopatik D. V. 3656
Lopatina O. P. 4163
Lord A. E. 7930
Lord A. E. Jr. 6771 7833
Lord J. D. 3983
Lord P. R. 107 140 3324 5125
Lorencka O. 68
Lorenz R. R. C. 957
Lorenzo L. 1404
Lotens W. A. 7721
Lotoshnikova Yu. V. 37
Lou A. Y. 1834
Loukawa M. 2570

Lourigan G. 694
Loutit D. F. 7289
Love T. 1466 4648
Lowell P. T. 7019
Lower E. S. 5211
Loweth B. 1505
Lowitt H. E. 7180
Loy U. 7970
Loy W. 3193
Lozanov E. 922
Lozhkina S. P. 492
Lu F.-M. 4286
Lubliner S. 615 1862 2104 2121 2884 4605 5430
Luchian A. 3218
Lucinski P. 4253
Ludwig H.-P. 3736
Luenenschloss J. 1769 2586 3434 4106 4175 4208 8067 8709
Luening R. 6645
Luepke N.-P. 4657
Lufang Y. 735
Luk'yanov V. G. 4090
Lukachevsky B. P. 494
Lukacs B. 4702 8144
Lukiewska M. 419
Lukosh A. 421
Lukoshaytis A. A. 152
Lukoshyunas A. A. 5524
Lukzcs J. 4697
Luna J. 6775
Lunde H. A. 5448
Lunina O. B. 8030
Lunn A. C. 4642 8396
Lunney H. W. M. 847
Lunyaka K. V. 5285
Luo Z.-W. 8169
Lupton C. J. 8687
Luque V. F. 1906
Lutsyk R. V. 316 672 4358
Ly N. 5467
Ly N. G. 7813
Lycka A. 441
Lydon M. 714
Lynch C. 1723 2349 3523
Lynch T. 7412
Lynn D. G. 8889 8904
Lynn J. E. 5247
Lynn W. S. 8889 8904
Lyon D. 8651 8652
Lyonnet A. 5801 6602
Lysenkov V. A. 4907
Lysun N. V. 5266
Ma C.-C. M. 4349
Maag F. 4993 5835
Maayani S. 8861
MacArthur I. 2334
MacDonald B. A. 6004
Mach D. 145
Machet J.-M. 7855
Machida Y. 22
Machii H. 577
Machlup F. 7973
Machnio M. 4086
Machnowska Z. 4480
MacIntosh J. 4802
Mackay B. H. 844 854 857
Mackie G. M. 8507
Maclean A. 1598
Madhusoothanan M. 8414
Maecker N. 7096
Maekawa Z. 1085 3520 6746
Magidman P. 29
Maglin R. A. 6207
Magloth A. H. 3714 5508 8630
Magnitsky A. A. 4727
Mahaian R. N. 7267
Mahajan S. D. 3435
Mahall K. 4070
Mahambare S. 6611
Mahar T. J. 673 1365
Mahmoud F. F. 7851
Mahone L. G. 4875
Mahoon A. 6307
Mai Y.-W. 6006 6008
Maidel H. 4078
Maie K. 1353
Maier G. 268
Mailhot K. T. 7095
Maillo J. 1988 6605 7296
Maillot R. 7836
Maj P. E. P. 5708
Majidi A. P. 981
Major G. 2206
Majumdar S. 828
Makabe H. 8581
Makachev A. N. 5015
Makarevich T. V. 476
Makhnovskii Yu. A. 5098
Makhover V. L. 183 4172 4998
Makhsudkhanov Kh. U. 8009
Makovei G. L. 3392
Makshakov S. P. 54
Maksimova R. A. 5049
Maksina Z. G. 6043
Makwana D. N. 3254
Mal'vinov E. A. 4918 8071
Malafeyev R. M. 4187
Malakhova N. P. 476
Malakoff N. L. 1359
Malarcher P. 1396 8649 8656
Malcomess H.-J. 3833
Maletskaya S. V. 277
Malhotra S. K. 3815 8739
Mali N. C. 7629 8550
Malini R. 6927
Malinovskii E. K. 8042
Malinovsky S. S. 4907
Malinowska D. 4913
Malinowski M. 4129
Malionka L. G. 534
Malkan S. R. 4285
Malkov S. M. 4198
Mallick P. K. 6014
Mallinckrodt C. 1398
Mallon P. J. 2637 4269
Malloy J. T. 7715
Malmstroem B. 7874
Malone M. F. 7350
Malone-Lee J. 6033
Malysheva I. G. 5371
Malyshevskaya K. A. 92 94 3968
Malyugin Yu. Ya. 93 4889 4891
Mammel B. 2606 3469
Mammone J. F. 4871
Manakova A. P. 157 170
Mancini A. 3012
Manders P. W. 7306
Mandhyan P. K. 5455 8683
Manertsev V. A. 745
Mangialardi G. J. 2407
Mangialardi G. J. Jr. 6443 6453 6455
Mani B. P. 910
Manich A. M. 837 950 970 1291 1710 1719 2510 2513 3046 3353 3387 3389 4931 4944 6582 7065 7088
Manley T. R. 1076
Manli G. 71
Manocha L. M. 6003
Mansfield R. 2475
Mansfield R. G. 74 288
Mansfield U. 7973
Mansour M. P. 3752
Many J. N. 4667
Many S. N. 5818
Mar J. W. 4329
Mararysheva T. S. 664
Marasulov M. Sh. 4164
Marchat B. 8868
Marchenko I. A. 396
Marchenko S. Ye. 1242
Marchese F. 8008
Marchetta C. 6499
Marchi L. 6348
Marchini F. 5636 8089
Marchioni M. 5761
Marchis A. 1744
Marchlewska T. 43
Margarit E. 3462
Marichev N. N. 230
Marienfeld M. 8665
Marini I. 3315 3317 6555
Marino P. N. 2513
Mark H. F. 1545 6029 8963
Markaryan S. S. 4079 4093
Markert D. 7118
Markides C. C. 8770
Markov B. A. 4187
Markovic S. 1902
Markovic V. 1902
Markowski M. 4391
Markrich L. 1286
Marler J. W. 7805
Marmer W. N. 29
Marom Z. 8861
Marsal F. 8142
Marsh D. E. 2019
Marsh P. B. 8854
Marshall N. 2857 2863 4568 4581 4585
Marshall R. 4795
Marshall W. J. 3944
Mart'yanova R. F. 423
Martel R. 3235
Martin C. 4265 8368
Martin J. R. 665
Martin M. B. R. 1906
Martin R. 3229
Martini T. 4419
Martinov T. 2170
Martuscelli E. 6499
Martynova A. A. 5096
Martynova L. A. 8219
Martyshenko V. A. 191
Marx G. S. 7941
Marxmeier H. 1140
Masachs M. 6502 6503
Mashhour M. M. 7851
Mashimova G. V. 4461
Maslanka T. 155
Maslennikov Yu. I. 5075 6705 7160
Maslouhi A. 2231
Maslowski E. 3312 3999 4866 5665
Mason O. O. 2208
Massa V. 5636 8089
Massafra M. R. 5794 7597 7800
Massard T. 1081
Massen R. 660 8720
Masson J. C. 4025 8059
Masson O. 4635
Masters K. 2705
Masuda Y. 598 838 8634
Masujima H. 984
Masuko F. 3590
Masuko T. 2818
Masutani M. 4319
Mate Z. 1166
Mathe K. 8210
Mathers J. P. 7332
Mathew M. D. 2429 4142
Mathews D. 8889
Mathews K. 2997
Mathias L. J. 4034
Mathur P. R. 2023 6474
Mathur S. S. 5705
Matic S. 2599
Matichard Y. 7835
Matik M. 7952
Matmusayev U. 14
Matsubara A. 1180
Matsuda H. 5559
Matsuda R. 7073
Matsuda T. 884 5711
Matsuhisa Y. 4101
Matsui A. 8597
Matsui M. 1438 2327
Matsui T. 1638
Matsumoto T. 8019
Matsumoto Y. 8433
Matsumoto Y.-I. 1621
Matsumoto Z. 8503 8504
Matsuo M. 1655
Matsuoka M. 8520
Matsuura T. 3279
Mattera J. 1282
Mattfield E. 7692
Matthews A. 557
Matthews B. A. 7098
Mattox R. M. 7766 7769
Matukonis A. V. 152
Matusiak D. 1766
Matveyeva T. N. 4499
Matyushinskaya L. B. 4163
Matzinger P. 3623
Maurer J. M. 3096
Maviyanov A. M. 4164
Maycumber S. G. 39 894 1485 1984 2490 3071 3114 3901 4000 4855 5601 5919 6342 6492 6603 7398 8197 8790 8962
Mayer M. 3346
Mayfield B. 979
Mayfield R. J. 7483
Mazars P. 592
Mazhirina G. S. 3264
Mazur N. A. 94 3968
Mazza C. 5763
Mazzara C. A. 8858
Mazzaraco M. 2665
McAllister J. W. 7332
McArthur W. C. 7270
McAulay T. 6954
McBryan A. 1017
McCarthy B. J. 7204
McCarthy C. J. 1197
McCartney L. N. 3983
McCoy J. W. 1797
McCready A. 2113 5424
McCulloch W. J. 276
McDermott M. 8874
McDermott M. P. 2432
McDonald R. 678 6292
McDonald W. F. 7538
McDonough W. J. 1077
McDowall D. J. 4040
McFarland K. 629 5430
McGoveran M. R. 1023
McGrath G. C. 6309
McGregor R. 418 449 5218
McIntosh G. 8538
McIntyre F. S. 1260 1358
McIntyre J. E. 5708 8113
McKenzie D. 3751 4482 7636 7712
McKinnon A. J. 8170

McKinnon R. A. 3588
McLaren K. 683 1600 3846 6293
McLaughlin J. R. 7575 8170
McMahon J. F. 207 943
McMahon P. R. 841 851
McMahon T. 4535 6360
McMeekin L. J. 6282
McNally H. 7805
McNamara A. 7858
McPhee J. 1631 1633 4826
McPherson J. 4566
McWalter K. 3954
Mead D. L. 2636
Meade R. L. 8761
Mears R. C. 189
Mears R. S. 2548
Meckel L. 3809
Medilek F. 2735
Medkova M. P. 4942
Medveczky G. 8210 8704
Medvedeva T. M. 5531
Meeks J. A. 5402
Meenakumari B. 5814
Megerdigian C. 4313
Mehra A. R. 6504
Mehra B. K. 8949
Mehra R. H. 6504
Mehta H. A. 413
Mehta H. H. 6868
Mehta J. K. 7173
Mehta K. T. 6923
Mehta M. V. 7200
Mehta P. C. 7199
Mehta R. 2085 6491 6512
Mehta R. D. 2221
Mehta S. 7319
Mehta S. C. 3435
Mehta S. M. 1641
Mehtani J. G. 7174
Meier H. R. 3664
Meierhoefer A. W. 4295
Meihua C. 5646
Meihua Z. 5695
Meijer J. 580
Meijuan L. 1981
Meikle J. L. 5693
Meisen K. 3615 5245
Meixia S. 5646
Mejer I. 4693
Mel'nikov B. N. 4403 4497 5309
Mel'nikova I. S. 4500
Melamed L. G. 232 5025
Melanitis N. 6310
Melinte A. 3207
Melnikov V. G. 745
Melnikov V. N. 483
Melnikov V. Ya. 4187
Melvin L. 6218
Memon N. A. 827 3179 6399 6402 6428
Memory J. D. 1827 3513 7490
Menault J. 2801
Mendez-Diaz I. 2229
Mengel H. 1445
Menges -. 7134
Menghe M. 5771 7376
Mensley S. 3884
Menzelintseva N. V. 363 5102
Mercader J. P. 3236
Mere T. 1770
Meredith W. R. 8001
Meredith W. R. Jr. 2407 6435
Meriggi R. 911
Merinescu M. 3965
Merken V. 7977
Merriman E. 7285
Merriman K. 6396
Meshishnek M. J. 7359
Messmer R. 4078
Meteleva O. V. 5384 6196
Methe E. 7932
Methfessel G. 8721
Meyer A. 5973
Meyer K. 3799
Meyer M. F. 1792 6061
Meyer U. 4107 5762
Meyer-Stork L. S. 7998
Mhatre N. D. 3436 8259
Mhatre S. H. 8492
Michals D. 501 618 1347 1996 2107 2117 2126 2946 2963
Michel P. 1775
Mielczarek M. 4506
Mierlusca I. 1727
Migaltso I. I. 336
Mihira K. 601 6225 6226
Mikayelyan I. M. 5082
Mikhailina R. N. 4889
Mikhailova O. Yu. 7360
Mikhailova R. N. 4891
Mikhailova S. A. 37
Mikhalovskaya L. O. 5153
Mikhaylov L. N. 4250
Mikhaylov L. V. 5550
Mikhaylov P. Ye. 50
Mikhaylova M. P. 4163
Mikheeva L. A. 63
Mikheleva G. A. 4883
Mikheyev V. A. 4178
Mikheyeva L. N. 172
Mikhlina L. P. 230 232
Mikhlina V. V. 4958 4970
Mikolajczyk Z. 4145
Miksinova N. A. 5449
Mikushev A. Ye. 5004
Mil'grom A. E. 4831
Mil'kova L. P. 4846
Milahsyus V. M. 5025
Milch D. 1296
Miles I. S. 85
Miles L. 4808 7799
Miles L. W. C. 1268
Miles M. H. 4650 8020
Militky J. 8722
Miller B. 2662 4652 4679 6054 7479 8732
Miller D. P. 8897
Miller I. P. 7407
Miller L. 1509
Miller P. B. 7673
Milligan G. W. E. 7832
Milligan M. W. 4278
Millington J. 1033 6683
Millington J. T. 1016 3402
Mills K. P. 447
Mills R. 2608
Mills R. W. 8305
Milne W. 7519
Milosavljevic S. 1968
Milton D. K. 8885 8911
Milyutina M. Ya. 4907
Min G. J. 1603
Min X. 4976
Minagawa M. 671 2868 6114 6119 6277 7011 8495 8521
Minamisawa K. 3231
Minea A. 1748
Minemura C. 7616
Ming C. 201 1758 5873 7419
Mingxing B. 521
Minshall B. 1356
Mints B. I. 128
Minying H. 206
Miotti F. G. 454
Mirina T. V. 150
Miroslawska M. 153 164 3312 3999 4896
Misbach J. 464 587 2058 3750 4570 5395 5403
Mischinev S. 4138
Mishenin O. A. 4531
Mishra P. 903
Mishra S. 1712
Mishra S. N. 8697
Mishra S. P. 2476 4053 6519
Misra S. N. 7068 7890
Misra T. 8685
Misra V. K. 3600
Missbach V. 4394
Mistry P. R. 1214 1975 3620
Mitchell B. 5414
Mitchell D. B. 3145
Mitchell D. J. 7342
Mitchell R. S. 2321
Mitchenko Yu. I. 102
Mitomo H. 1672 6528
Mitov G. 1706
Mitra S. 1985
Mitrezov M. 7949
Mitrofanova T. G. 7983
Mitrovic M. 1835
Mitryukhin V. I. 263 4260
Mitsuishi M. 1927 3652
Mittal J. P. 1624
Mittal R. K. 5699
Mittal R. M. 3641 5184 6083 6084 6818 6824 8435 8569
Mitter J. M. 5956
Mittmann J. 1093
Miura M. 3231
Miura N. 7526
Miura T. 2621
Miyamoto K. 6114
Miyamoto T. 838
Miyazaki K. 4468
Mizerovskii L. N. 78
Mizoguchi K. 7083 8392
Mizonova N. G. 5002
Mizuno T. 5296
Mizutani H. 297 588
Mizutani M. 8429
Mkrtychev K. N. 7321
Mladenovic S. 1835
Mo S. Y. 1823
Mochalov I. P. 8913
Modi C. V. 8190
Modi J. R. 7629 8550
Modig N. 1777 3460 5065 5072 5925 7442 7876
Moerbel F. 8800
Moeser H. 4469
Mogi T. 8494
Mohamed A. P. 4667
Mohamed M. 6052
Mohamed M. H. 999 1012 6672
Mohammed A. P. 5818
Mohanty T. R. 7984
Mohapatra C. R. 7996
Mohapatro L. M. 7984
Mohiuddin G. 937
Moin D. 1386
Moiseenko F. A. 4256 5046 6279
Moiseyenko T. N. 740
Molinero J. 3553
Moll P. 525 2393 2394 3704 6987 7894
Molnar S. 4019 4024
Molokov V. L. 5207
Molto M. A. P. 4158
Mommessin M. 7852
Momota H. 8591
Mondini G. 4909
Monnet J. 7852
Monostori G. 209
Montaudo G. 906
Monte S. J. 6011
Monteiro J. A. 1234
Montes C. G. 1906
Moonen T. 1953
Mooney D. 8327
Moore D. R. 3512 8736
Moore G. K. 5950
Moore J. 2657 7015
Moore J. F. 3216 3217
Moore M. 5547
Moore M. R. 813
Moore R. H. 7847
Moores R. J. 1048
Moorti T. V. 5496 6483
Mooy L. M. 5458
Mordasova N. A. 422
Mordecai A. M. 3129
Moreau J. 5257 6913
Morel G. 7772 7837
Moreland B. 579 586 4569 4575 7002
Moreland E. 4571 7000
Morell J. V. 2869
Morgan R. J. 7500
Morgner F. 927
Morgner F. W. 5728
Mori M. 2763
Mori N. 3043 3970
Mori T. 22
Moriconi E. J. 7194
Morimoto Y. 6277
Morina V. S. 4114
Morisaka T. 6947
Morita M. 81 2680
Morita Z. 6874
Morland A. 7086
Morley D. 6261
Morolli G. 7873
Morozov G. K. 5025 5028
Morozov S. V. 232
Morozova T. I. 230 232
Morris J. C. 3297
Morris N. M. 4758
Morris P. 2074 7697
Morris W. J. 1726 6048
Morshed M. 6388
Morton J. 7503
Moryakov Ye. V. 4934
Moscovitch T. J. 1593
Moser B. 4185
Moser L. S. 1946
Moshkov A. A. 169
Moshkovich L. G. 284
Mosimann W. 1928 8539
Moskaliuk K. 4670
Mosleh S. 6273
Motanov V. G. 234 4235 5506
Motomura H. 6874
Motskene N. S. 317
Motte R. 5764 7370
Movshovich P. M. 150 4117
Mrozewski Z. 240
Mrshtina V. 321 6774
Mshveniyeradze A. P. 5033
Msuda Y. 8629
Mtiulishvili I. M. 5192
Mu Y. 376 662 3051
Mucha K. 4098 4105
Mueller D. H. 1812 3501 3503 5976 7654
Mueller G. E. 3675
Mueller J. 5750
Mueller K. 65 3255
Mueller M. 3989
Mueller R. 1044

Mueller T. 8081
Mueller-Golchert W. 8974
Mueller-Litz W. 6032
Mues C. 3241
Muezel F. 3541
Mujin S. 874
Mujumdar A. S. 7960 7961 7962
Mukhamedzhanov G. K. 315
Mukherjee A. K. 3628
Mukherjee B. 8000
Mukhiddinov D. N. 494
Mukhina A. I. 5406
Mukhopadhyay A. K. 5817
Mukhopadhyay B. N. 5616
Mukhopadhyay S. K. 5986
Mukhopadhyay U. 334 1290 5615
Mukhortova L. I. 5210 5265
Mukhortova L. V. 4461
Mukimov M. M. 239
Mull J. 8877
Mull J. C. 8878
Muller D. 354
Multhauf M. 4628
Munshi V. G. 3221 3398 6614 7809
Munslow W. 7905
Murai K. 1781
Muraki T. 4336
Murase Y. 1661 6552 8111
Murfet G. J. 3561 3562 3886
Murphy J. M. 1195
Murrweiss H. 4213 6661
Murtha T. P. 1834
Murthy P. L. N. 6319
Musale S. V. 1223 1937
Musatov V. A. 4277
Mushak P. 5260
Muthukumaraswamy P. 7190
Mutschler G. 6146
Muza S. R. 7734 7738
Myasoedov E. P. 5129
Mychko A. A. 307 4354 5121 6045 6757
Myles B. 7781
Myrick D. E. 4304
Myshkina S. M. 5368 6224
Naarding W. J. 6453 7988 8157
Nachane N. D. 3521
Nachane R. P. 2541 2547
Nacken H. 7654
Nadzhimutdinov Sh. 4974
Naeem M. 8735
Naeem S. 1614
Nagai Y. 3037
Nagano A. 2821
Nagariya A. S. 5000
Nagasaka H. 6816
Nagata M. 919 6386
Nagura M. 25
Nagura S. 1204 6943 7571
Naik A. 44 3291 3533 8204
Naik D. S. 432
Naik V. G. 1216
Nairn J. A. 7496 7822
Naitong M. 6580
Nakagawa M. 2769
Nakagawa S. 7013 7016
Nakajima A. 69 70
Nakajima S. 1962 2736 7083
Nakajima T. 1209 1958 3308 8493
Nakajima Y. 3232
Nakakura T. 4319
Nakamae K. 2685 6744 8019
Nakamura K. 2486 3043 3970 4870 8127 8433
Nakamura M. 8166
Nakamura T. 569 3858
Nakanishi S. 3590
Nakano K. 1074
Nakano M. 1232
Nakano N. 8675
Nakao F. 6759
Nakao K. 2633
Nakao S. 1210
Nakashima K. 444
Nakata Y. 1650 2457 2471
Nakatani M. 6759 8725
Nakatsuji S. 444
Nakazato K. 1672 6528
Nakazawa K. 324
Nakazumi H. 3991 7926
Nakura M. 8429
Nam S. W. 1617
Namboodiri M. K. 283
Nanashima N. 7616
Nanavare S. Y. 8470
Nance W. 7683
Nanda S. 7984
Nanxun H. 5695
Narain R. 7202
Narasimhan K. M. 5669
Narrasimham K. V. 2085 4852 7346 7594 7595 7974
Naslain R. 878 7317
Naslin R. 5656
Nason D. 2564
Nasonova S. N. 4767
Nastase O. 1921
Natanson I. Kh. 3265
Natarajan K. S. 5818
Natural'nova L. N. 92
Nau G. 1730 1736 1737 1757 1760 1776 1815 2029 2291
Nauen V. K. 6041
Naumann J. 3741 4755 5685
Navone M. 889 1156 1686
Navratil J. 459
Nawlicka J. 4869
Nayatani Y. 8724 8726 8727
Naylor G. R. S. 8744
Nazarenko T. S. 320 3394 7477
Nazarov A. G. 4936
Nebesar R. 1280
Neborako A. I. 4193
Neckar B. 3395 5155 8703
Needleman C. 8655
Needles H. L. 3058 6936 7476
Neely N. E. 694
Neeper J. 4813
Neffe S. 7481
Negi Y. S. 914
Negodyaeva G. S. 4839
Negre D. M. R. 3665 4425
Nehrenberg D. L. 1745 2556 4165
Nekhaenko E. A. 3966
Nekhlorochenko I. O. 5060
Nelson D. L. 5982
Nemanova O. F. 5530
Nemeth J. E. 7365
Neogi U. 6567 6585
Neral B. 3582
Nerurkar S. K. 8156
Nestle G. N. 1136
Nestler R. 2043 3716 3729
Neubauer H. 3694
Neudorfer G. 3397
Neuhaus L. 2512 5773 6477
Neumann M. G. 460
Neumann W. 4639
Neumeyer B. 3023
Nevola L. 7408
Nevskikh V. V. 4163
Newcomb W. 8592
Newcomb W. N. 7187
Newcomb W. W. 6593 7186
Newell E. D. 4301
Newman B. 3861
Newman D. C. 7293
Newman J. 1339 1340 1342 1343 1391 2110 2123 2981
Newman R. O. 2383 7290
Newton D. 5055
Neytzell-de Wilde F. G. 4768
Nezu O. 8901
Nguyen H. X. 4309 4333 6716
Nicholls P. J. 8864 8874 8883
Nicholls R. 6038
Nicolais L. 6499
Niederlohmann R. 487
Niemunis A. 7529
Nigam J. K. 7358
Nightingale A. 3405
Nignatov K. N. 8009
Niiyasu Y. 8433
Nikiforova Z. V. 4407
Nikishin V. A. 4936
Nikitin A. A. 4837
Nikitin I. V. 4917
Nikitina O. A. 4846 7299
Nikitina S. P. 8062
Nikko W.-D. 1932 6884
Nikolayev S. D. 213
Nikolayeva N. N. 307
Nikolayeva T. Yu. 4940
Nikolayshvili Ye. D. 5192
Nikonorov P. V. 4915
Nikpur K. 7510
Nilsson N. 1506
Nimkar M. V. 8491
Nimmo W. 4539
Nishi N. 3232
Nishi T. 8377
Nishida K. 2770 6916
Nishikata Y. 5659
Nishikawa A. 4468 5332
Nishimatsu T. 1459 2220 7082
Nishimura A. 4101
Nishimura T. 2486 5687 8127
Nishino T. 8019
Nishino Y. 1435 8423
Nishioka T. 3231
Nishkam A. 1258
Nitsche D. 4411
Niwa M. 1458 6748 8609
Niwaya H. 3060
Nixon G. 4567
Nixon J. A. 3512
Njegomir M. 2210
Nkeonye P. O. 426 1236
Nockert M. 1308
Noda E. 7549
Noda K. 7549
Noel C. 694
Noether H. D. 4063 8119
Nogues B. 4824
Noishiki Y. 3311
Noji Y. 6854
Nollek H. 6970
Nollen D. A. 4322 4347
Nomiyama I. 8391
Noonan E. 8417
Nordgren G. 1165 4987
Norkaytis I. M. 4356
Norman C. 6336
Norman R. B. 1508
Norota S. 5689 8066
North B. 694
Northey G. A. 2862 2864 8769
Norvell R. G. 6311
Norwick B. 542 8641
Nosov M. P. 320 3273 3394 4958 4970 5118 5123 6025 6797 7477 7545
Novikov V. P. 4214
Novikova I. L. 4080
Novikova T. I. 182
Novitsky T. J. 8885
Novolodskaya I. G. 170
Novoradovskaya T. S. 5227
Novoradovsky A. G. 312 4371 5207
Nowak C. 7476
Nowak G. 8357
Nseslund P. 6467
Nunes J. 6299
Nunn N. J. 7905
Nyiri M. 7979
O'Bradaigh C. M. 2637 4269
O'Connor M. 3583
O'Hearn T. P. 5109
O'Leary N. 1602
O'Leary R. K. 5819
O'Neill F. 2010 2164 2453 3482 5436 6533
O'Rourke M. T. 4708
O'Sullivan D. 2049 2467 6524
Oaki K. 1664
Oakland B. G. M. 1427
Oakley E. R. 633 634
Oakley S. R. 7055
Obendorf S. K. 582 1295 4593
Ober C. K. 4694
Oberoi R. C. 6483
Obolenski B. 8709
Obst J. 1539
Ochalska B. 8873
Ochkurenko V. I. 5121 6045 6757
Oda K. 1722 8233
Odagiri N. 4336
Odom E. M. 658
Ody P. 6230
Oehlke N. 573 575 2057 2059 2060 2078 4574 5397 6211 6212 6995
Oelkers J. M. 5960
Offermann P. 4666
Ogada N. 1437 1439
Ogale A. A. 4314
Oganesyan S. B. 8009
Ogasawara I. 8003
Ogata N. 920 7396
Ogawa H. 5379
Ogawa T. 1228
Ogita T. 7366
Ognev V. A. 284
Ogundiran A. 8872 8879
Oh S. K. 825
Ohira K. 2471
Ohmes E. 65
Ohmi G. 500
Ohmura K. 909 6795
Ohta K. 7829
Ohta N. 3844
Ohta T. 6538
Ohtani K. 1446
Ohya S. 7416
Oka P. G. 3350
Okabe H. 7073 7074
Okabe K. 8625
Okabe M. 5559 6880
Okabe S. 5332
Okada K. 6386

Okafor C. O. 7618
Okajima K. 1637 1638 5558
Okamoto I. 2868
Okamoto J. 3485
Okamoto K. 1438
Okamoto M. 8068 8117
Okamoto R. 6936
Okamura M. 8159
Okawa K. 8494
Okayama T. 62
Okhotin A. S. 5530
Okoniewski M. 4036 4037
Okoshi Y. 8706
Oks B. S. 5060
Okui N. 8047
Okukubo A. 2952
Okumura J. 6943 7571
Okura A. 1047
Okuyama K. 3232
Olenchock S. A. 8875 8878
Olivella I. 7088
Olivieri P. 3289 5091
Oloniewski M. 4877 4888
Olshanskaya O. M. 4214
Olshansky V. I. 4560
Olson C. X. 3842
Olson L. 7638
Omar M. M. 4467
Omel'chuk V. S. 4735 5272
Omelchenko V. D. 241
On J. G. 1680
Onica F. 2170
Onikov E. A. 224 4214 4983
Onishchenko L. A. 336
Onishi T. 577
Ono H. 3970
Onuma T. 8698
Ookoshi Y. 882 3263
Oosten A. J. 6785
Orchon E. S. 472
Orchon S. 472
Orda E. D. 8218
Oreliski P. A. 5819
Oreskovic V. 2297
Orgel D. 1320 1324 1482 2893 2914 2916 2983 5353 6169 6693
Orlova N. P. 4126
Orlova S. I. 551
Orlovsky B. V. 4552
Oroszlan M. 7760
Ortiz B. 5576
Ortwein L. 7856
Osawa M. 8611
Osborne M. J. 1990
Osborne R. J. 6075
Osik Yu. I. 5293
Osipenko I. F. 3656
Osipov A. S. 4940
Oskin L. I. 4942
Osmont E. 4049 8107
Osten S. J. 8232
Ostroff J. 16 3161 5409 5419 6400
Ostroskaya A. V. 4965
Ota K. 8233
Otake M. 2039
Otsu Y. 7549
Ott H. 268
Otta P. K. 7984
Otterpohl I. 4646
Ottich R. 6181
Ovchinnikova T. N. 4893 7360
Overton W. 1059
Ovsyankina V. N. 284
Owaki S. 1661 6552 8111
Owczarz R. 1768 4210
Owen A. J. 6544
Owen M. S. 4590
Owen P. 926 1006 1475 1522 1954 4740 5537
Owen-Crocker G. R. 1304
Owens J. T. 3390
Oxenham W. 4898 5771 7376
Oya M. 7011
Oye R. 62
Oza K. 8531
Ozawa N. 8918
Pacetti S. 1963
Paczesny K. 136
Padgett T. 8696 8700
Padhye R. N. 1930
Padmanabhan A. R. 6587
Paduraru V. 8344
Paetzold F. 2315
Pagano N. J. 6302
Page C. T. 1177 2751 8743
Page D. H. 2233 7547
Pages B. 5757
Pages P. 1256
Pagoda D. M. 501 1997 2811
Pailler R. 5656 7317
Pailthorpe M. T. 397 1547 5472
Pakhomov Yu. I. 7303 8846
Pakhomova I. P. 4500 5316
Pakhomova N. G. 340
Pakshver A. B. 52
Pakshver S. L. 83
Pal P. K. 8153
Palairu S. 8400
Palan B. H. 8388
Palet D. 8142
Paliga S. 4171
Palin M. J. 2438 8734
Palit S. 5726
Paliwal M. C. 6584
Palladova M. S. 5153
Palmer D. W. 8185
Palmer J. M. 832
Palmieri J. 2921
Palmieri J. E. 2006 2100 2919 2987
Palyutin P. P. 5522
Pan N. 7291 7815 8713 8716
Pan W. 8028
Pancholi B. S. 3813
Panconesi G. 6089
Pandey S. N. 1613 2429 2784 3213 3505
Pandit B. V. 1543
Pandit S. 6536
Pandolf K. B. 7734
Pandya B. 7552
Pandya H. B. 6084 7200
Panev P. 4441
Pangborn R. N. 2640 3515
Panichkina O. N. 8077
Panin I. N. 277 4173
Panken N. 3580
Pano P. V. 8567
Panomareva L. M. 335
Panova L. N. 95 4965
Pantaev V. A. 4957
Pantelimonescu F. 8163
Pao Y. C. 8354
Papanicolaou G. C. 5722
Papaspyrides C. D. 5722
Papcova I. I. 5679
Papina N. G. 4523
Papkov S. P. 3967 4858 4889 8031
Paplinski D. R. 7359
Paradkar A. K. 6063
Paradkar T. L. 3335 6566 8143
Parajia J. S. 1729
Paralikar K. M. 3969
Parausanu V. 2301 3962
Parekh R. R. 445
Parikh B. S. 7201
Parinov M. A. 114
Park B. J. 6766
Park J. 1224 1929 2752 3603 6862
Park S. K. E. 2880
Park Y. H. 1617
Parker B. 2838
Parker D. 6972
Parker J. S. 3319
Parker S. M. 7434
Parkinson G. 5655
Parkinson J. M. 2310
Parks M. A. 2559
Parkyn A. T. 6044
Parnaik A. G. 3651 6930
Parola R. 2982
Parra J. L. 837 8547
Parrella J. C. 1069
Parshikova V. N. 313
Parthasarathy M. S. 3203 5453 5754 6591
Parthasarathy S. 975 4016
Pasechnik A. I. 5106
Pashayev N. P. 5360
Pashin Ye. L. 4820
Pashkova G. F. 226
Pasquale J. A. III 8561
Pastore C. 1045 5959
Paszternitzy Gy. 2293
Pataki L. 731
Pataki P. 7848
Patange B. P. 8767
Patel A. 8685
Patel A. I. 7173
Patel B. K. 6523
Patel B. M. 6868
Patel C. D. 6664
Patel D. L. 8512
Patel M. H. 7173
Patel M. R. 7173
Patel N. B. 6537
Patel N. M. 6523
Patel R. S. 6584
Patel S. K. 1214 1975 3597 3620 6878 8488
Patel S. P. 7184
Patel T. 8685
Pathak A. G. 969 2403 5694
Patil N. B. 5604
Patil V. K. 7567
Patra K. C. 8685
Patterson D. R. 886
Patterson H. T. 8556
Patwardhan S. 7033
Patwardhan S. S. 8470
Patzwahl K. H. 3082
Paul J. 1258
Paulsen H. C. 455
Paulson J. N. 7527
Pavel'yev K. I. 110 4081
Pavlov A. N. 104 6726
Pavlov P. 922 1648
Pavlov V. A. 54
Pavlov V. P. 5529
Pavlova O. I. 7904
Pavlova S. V. 4461 5210
Pawar N. 6935
Pawar V. D. 6568
Pawlikowski G. T. 7342
Pawlowski W. P. 4769 4770
Peacock J. A. 6310
Pearshouse C. 1503 3128
Pearson J. S. 5598
Pearson S. 1428
Peceny R. 6556
Peckens R. 6304
Pedersen A. 7005
Pedersen N. E. 7801
Pednekar A. 6611
Peifang Z. 227
Peiwu J. 1265
Pekacka M. 985
Peker A. S. 93
Peklaytis V. K. 5025
Pelczynski S. 136
Pelka S. 750
Pels W. 3897
Peltzer D. H. W. 433
Penczek P. 3961
Pendzimas D. 1166
Pepio M. 7296 8451 8505
Perchugov G. Ya. 7904
Peregi G. 8407
Pereira P. 2418
Perenich T. A. 3142 7908
Perepelkin K. E. 3391 5131
Perepelkin K. Ye. 5121 6045 6757
Pereyaslova D. G. 1907
Perfetti J. 7524
Perkins H. H. 7992
Perkins H. H. Jr. 2456 6447
Perkins W. G. 968 4125
Perkins W. S. 1982 2568 5837 8564
Perkowski J. 4764
Perlingieri I. S. 2968
Pernick D. 1017 1136
Perrachon A. G. 2242 3793
Perrier H. 7772
Perry R. S. 8463
Pervadchuk V. P. 56 4886
Pesch A. E. 3658
Peskova V. I. 63 4829
Pesnya O. I. 3257 3655
Peter E. 8485 8486
Peter H. 7722
Petermann A. 8776
Peters A. T. 3622
Peters J. 5661 7777
Petersen H. 3657
Peterson C. W. 7533
Peterson E. A. 7714
Peterson K. A. 8354
Peterson R. V. 7359
Petersson B.-G. 565
Petko I. V. 4534 6980
Petkov B. 1648
Petrick M. 8453
Petrisko R. A. 4316
Petropavlovsky D. G. 374
Petrov M. I. 369
Petrova A. N. 147
Petrova I. N. 4371
Petrova L. N. 4496
Petrova N. A. 5330
Petrova O. P. 5130
Petsonk E. L. 8884
Petterlin A. 7343
Peysakh Z. Ye. 5043
Pezelj D. 1979 2064
Pezelj E. 2064 2210
Pfaff M. 4627
Pfalz M. 3340
Pfannschmidt B. 3770
Pfeffer-Hahn R. 3122
Pfeiffer F. A. 8687
Pflueger G. 4754 7176 8906 8909
Pfluegl K. 4280
Phalan P. 4301
Pham L. T. 7332
Philipp B. 915 3255
Phillips D. 1495 2617

Phillips D. F. 2973
Phillips L. 572 7701 7705
Phillips M. G. 3512
Phoenix S. L. 7821
Piacitelli G. M. 8875
Piarkkanen J. 359
Picciotto R. 8571
Picker J. 5644
Pickering C. A. C. 8863 8867
Pickering H. 245
Picozzi R. 7129
Piekarska S. 175
Pienchocki J. 3961
Pierce J. Jr. 8912
Pierre M. 589
Pieters W. A. 467
Piggott M. R. 2217 3517 4320
Piglowski J. 3305
Pijanowski R. 1778 4668
Pilgrim H. 7387
Pilgrim H. A. 4960
Pilchowska-Gwozdz S. 43
Pilisi J. 5869 5886 5888 6650 6669 7254 7409
Pilkington D. J. 4539
Pillay K. P. R. 6571 7377
Piller B. 2649 4237
Pimental N. A. 7738
Pinchuk P. A. 7325
Ping W. 3045
Pingsun Z. 6697
Pipa B. F. 6704 7159 7161 7162
Pipes R. B. 4269 6297 7819 7825
Pisareva L. K. 5238
Pishchikov V. A. 4557
Piskorosky G. A. 4733
Piskunova T. I. 5306
Pislaru P. 8400
Pitassy P. I. 6363
Pittman B. 3426
Pitts W. C. 5138
Pizzala A. 7196
Plaks N. 7520
Planck H. 3500
Plate D. E. A. 116 159
Platov Yu. I. 7325
Pledger V. 7283
Pleshanov V. V. 5205
Plonka S. 4121 4123
Plutecki K. 4186 4194
Pochtar' V. N. 5074
Podbornov N. V. 496
Poddubnyi V. I. 8041
Podkuyko I. I. 4248
Podlesskaya N. K. 7334 8041
Podloznaya K. G. 4463
Podogrocka E. 420 428
Podstata J. 441
Podstawczynski R. 126
Podvalnin A. V. 4531
Podyachev A. V. 4711
Poeschel E. 11
Pogoda D. 5413
Pogoda D. M. 505 1337 1392 2120
Pogodina V. V. 5156
Pohl K. 1780 7600
Pokorny J. 3851
Polaczek A. 4351 4357 4359
Polak J. 1772
Polejes J. D. 497 6159
Polishchuk N. S. 5122
Politova R. V. 4807
Polka A. 4459
Pollone F. R. 6468
Polosov A. A. 4546
Polovikhina L. A. 169 5129
Polozov V. G. 5298
Polpur N. V. 92
Polyak T. B. 4807
Polyakov A. A. 4940
Polyakovsky L. Yu. 5012
Pomanova L. V. 5412
Pompe W. 3518
Ponomareva M. A. 5542
Pons J. P. 2046
Poole E. 5540
Poole E. R. 1947
Poon C. 6315
Pop M. 1987
Popa C. 1748
Popescu G. 3965
Popikov I. V. 5311
Popov A. F. 129 4917
Popov L. N. 178
Popov V. A. 7308
Popov V. I. 1907
Popova I. B. 5302
Popova L. S. 531
Popovsky A. U. 5039
Poppenwimmer K. 2038 8610
Popryadukhin A. V. 4941
Porraz J. L. 7523
Porraz M. 7523
Portmann E. J. 3916
Porvatova L. M. 4500 5316
Posey J. C. 7624
Posey J. E. 2656
Postle R. 673 1365 3208 8717
Potepalov V. F. 277
Pourrier J. 6677
Poursartip -. 4333
Poursatip A. 1145
Powderly D. 652 3080 3081 6851
Powell A. S. 3583
Powell B. 7708
Powell D. G. 4034
Pozhlep A. 5651 8082
Pozzo P. D. 5528
Pragg L. V. 1490
Prakasam R. 3047 6575
Prakash J. 4925 6573 6640 8137 8138
Pranschke P. 8663
Prasad N. M. 6865
Prasad U. 7417
Prati G. 6275 6324
Preda A. 3320
Preda C. 8344
Prediger R. S. 3512
Prelini G. 6149
Preuss T. E. 3830
Prevorsek D. C. 4059 4380 6385 8121
Pribavkin A. A. 3265
Price J. B. 4920 6433
Price J. P. 3821
Prickett L. J. 2505
Prickett T. J. 8852
Priestland C. 7953
Primachenko B. M. 179
Primak M. Ye. 6356
Primkulov M. T. 8009 8172
Princz F. 1701
Prine J. 3032
Pritchard G. 2639
Privratska J. 1810
Proctor C. W. 8221
Proctor H. 5367
Prodea V. 3932
Produvalova S. S. 485
Proffitt T. J. Jr. 8556
Progar D. J. 2644
Prokhorova I. A. 179
Promtova N. A. 5153
Prosser R. A. 2692 2693
Prostyakova L. A. 182
Protz B. 268
Protzner A. 268
Proulx D. 2231
Provost J. R. 466 3601 3607 3642
Prozorova G. E. 4889 4891
Przetakiewicz W. 7481
Przybinski J. 4760
Przybyl K. 1698 4129
Przybylski C. 4459
Pshenichnikova T. M. 4403
Puckett J. A. 6783
Puckett M. 5533
Puech J. P. 7775
Puente P. 8505
Puetzschler F. 4806
Pugachev Ye. A. 5554
Puig-Cavero J. M. 7461
Pujadas J. 837
Pukhov V. M. 4081
Pullen R. 4785
Pupyshev I. D. 733 7325
Purkayastha A. 1938
Purohit S. K. 1625
Purrington S. T. 4769 4770
Purslow D. 767 3814 7491
Purusov A. V. 233
Pusheng C. 206
Pustovalova N. I. 5412
Putyakov V. F. 4483
Puzikova N. P. 322
Pybina V. A. 4248
Pykhly V. A. 740
Pylova G. I. 215
Qian G. 8110
Qianlong C. 303
Qicheng Z. 5731
Qihui W. 6592
Qing S. 282
Qingji W. 5650
Qingrui W. 5658
Qinyi W. 4916
Qixian H. 192
Quataert D. 1414
Queeney R. A. 2640 3515
Quenard G. 6091
Quenisset J. M. 878
Quicheng Z. 7368
Quigyi F. 1653
Quirk R. J. 858
Quiye Z. 220
Qungji W. 7357
Rabinovich E. 5044
Rabinovich R. S. 4936
Rabinowicz E. 7316 7543
Rabkin R. L. 3382
Racine A. 7673
Radeka M. 7307
Radhakrishnaiah P. 5125
Radhakrishnan M. 7890
Radhalakshmi K. 5814
Radu C. D. 8533
Radu D. 1905
Radu I. 8400
Radu R. 1987
Radut N. 8400
Rafael H. 6823
Raffaelli D. 1679
Ragheb A. A. 8554
Raghunath R. 4442
Raheel M. 5304
Rahmen Z. 403
Raidt P. 47 1644
Raimel E. 333 3754 6242
Rajagopal R. 3625 3626
Rajagopalan A. 3625 6568
Raje C. R. 2784
Rajendran B. 1096
Rakas M. A. 4067
Rakhamberdyyev G. 4164
Rakhmanov N. T. 4912
Rakitina N. V. 7324
Rakowski W. 386 430 5226
Rakshit A. K. 6727
Ralston L. 1628
Ramakrishnan N. 6587
Ramamoorthy K. 3227
Ramamurthy T. N. 5453
Raman R. 2488 3267 3290 4852 6491 6512 7974
Ramaszeder K. 3341 4995 7371
Ramisch R. P. 3668 5317 7655
Ramnath V. 7827
Ramseier U. 1299
Randall D. 8469
Ranford S. L. 836 8006 8447 8745
Ranganathan S. R. 4821
Rangnekar D. W. 445 7554
Ranic-Cvetic E. 8225
Rankilor P. R. 1128 1131 2672 3532 8668
Ransom S. 2075 3737 4136 6124 6993 7699
Rao A. L. N. 1961 5700
Rao B. M. 810
Rao B. V. 8517
Rao C. S. 3641 6160 7629 8550
Rao C. V. S. 8819
Rao D. R. 32
Rao M. K. 7033
Rao M. V. S. 3813 6607 6780 8710
Rao R. A. 8158
Rao S. B. P. 3203 3210 3212 3222
Raoul L. 5864 6647
Raphael C. 1409
Raphael J. 1409
Raschle P. 1464
Rashevskii A. P. 3810
Raslawska D. 118
Rasmussen B. 7726
Rassolova E. A. 8219
Rastorguyev A. K. 108 4504 5519
Ratajczyk B. 386
Ratajska M. 4956
Raterman J. 2622
Rathakrishnan P. 8190
Rathi K. 6474
Ratnam T. V. 5489
Rattee I. D. 1236 1930 3593
Ratti A. 1489
Rauch T. M. 7733
Rausch W. 2031 3700
Raval K. A. 1942 3624 3633 6915
Ravichander C. M. 6564
Ravindranathan A. V. 6568
Raw J. I. 453
Rawlik B. 4919
Rawlings G. D. 8686
Ray A. R. 7984
Ray S. K. 8697
Rayatskas V. L. 520
Rayburn S. T. Jr. 6448
Raye I. 3134
Raykina A. A. 5595

Raymond G. P. 7783
Raymond S. 424
Raz S. 1040 4233 5087 5898
Razgonov N. T. 734
Razova N. G. 8077
Razumova A. T. 4461
Razumova Ye. A. 113
Razumovsky V. T. 169
Rebeck G. 537 1135 5664
Rebenfeld L. 1454 1596 2662 7105 8732
Rebsamen A. 3381 3592 4131 5007 6104 6126 6639 8250 8478 8480
Rebski K. 4919
Red'kin I. O. 4272
Reddington J. J. 7217
Reddish J. 8904
Redlich G. 1772 1869
Redrukhina T. B. 150
Redu C.-D. 3566
Reed M. 539 2112 3709
Reed M. W. 987 1743 1982 2557 2560 5837 8564
Reed P. E. 6305
Reed W. 1194
Reedy E. D. 1141 8358
Refai R. 6142 8553
Rehfeld C. 8879
Rehfield L. W. 6319
Rehling C. 8220
Reichter A. 4887
Reife A. 7909
Reinert G. 3606
Reinhardt H. 1100
Reinhardt R. M. 380 1957 6143 7089
Reisch M. 8785
Reisch M. S. 3107 6857
Reisfeld A. 2683
Rejhons F. 5520
Remund E. 2732 4418
Ren J. 7086
Renhze C. 7382
Renming X. 2545
Renner F. 6671
Renner M. 5753 5800 5894 6589
Renner R. 1759
Reno J. C. 5955
Renzhe C. 6272
Resl S. 7525
Ressel P. 3700
Reumann R. D. 4666
Reutsky V. A. 5310
Revishvili B. Zh. 4943
Rexhausen I. 3725
Reyes J. 6451
Reyes J. C. B. 8897
Rezmenov A. D. 4196
Reznik A. M. 14
Reznik K. Ya. 7318
Rhee J. M. 1680
Rhodes V. H. 980
Riahi G. 4333
Rice J. E. 4676
Rice S. 2975
Rich D. C. 3585
Richard P. 1107
Richardson G. N. 6777 7787 7841
Richman L. S. 4804
Richmond B. 5357
Richmond M. L. 2882 2947 3690
Richner P. 3947
Richter C. 6271
Richter E. 2851
Rickloff J. R. 5819
Ricupero T. 5091
Riddle P. J. 4280
Riddle W. D. 439
Ridgeway B. 4641
Ridgway J. S. 880
Rieche H. 7431
Riedel D. 493 6949 6950
Riedel J. 1115
Riedel J. E. 5688 6018
Rieder O. 5053 5936 7450 8293
Riederer J. 3807
Rieger W. 4689
Riehl L. 762
Rieker J. 407 1203 4688 5471
Riepe D. A. 8232
Rietsch F. 907
Rietz M. 3950
Rigamonti A. 1478 3153
Riggert K. 8747
Rigo J. M. 6059
Riley S. 2819
Riley S. W. 560 8509
Rilling R. 4969
Ringens W. 3832
Riondy G. 7835
Riou S. 7181
Ripke C. 6111 8490
Rippon J. A. 1252
Rising J. 7703
Risse J. 7771
Risseeuw P. 7528
Rist D. 1444
Ritchie J. E. 4532
Ritrievi K. E. 6016
Ritter S. 1017
Riva A. 6902
Rivett D. E. 2709
Rivin V. R. 4187
Rizaev N. U. 5557
Robbins J. S. III 7069
Robers F. 1350 6122
Robert K. Q. 2782 7391 8173
Robert M. 3553
Roberts B. K. 4312
Roberts C. 5048
Roberts M. 621
Roberts N. K. 1144
Roberts S. 372 8659
Robin P. S. 6813
Robinette K. M. 7729
Robinson F. 6701
Robinson G. A. 159 7678
Robinson H. 1276
Robinson H. H. 7821
Robinson I. M. 6064 6310
Robinson P. W. 7575 8743
Robinson R. 4313
Robinson V. A. 8869 8877 8884
Robinson V. N. 8905
Robotti G. 8818
Rodeffer G. H. 8969
Rodgers J. E. 964 7067
Rodgers W. K. 3029
Rodicheva V. L. 415
Rodiger V. 4135
Rodman C. 1101
Rodman C. A. 3546 5998
Rodosi P. 738
Roebuck B. 3983
Roesch G. 4405 6825 8235 8449
Roesch O. J. B. 3718
Roesel H. 3643
Rogers C. D. 7579
Rogova A. N. 4126
Rogova E. A. 171
Rogovin Z. A. 7314
Rohner E. 406 5199
Rohner J. 4967 5776
Rohner R. M. 418 6103
Rohr A. V. 4610
Rohrbach M. E. 8870
Rohrbach M. S. 8860 8862 8871 8900 8903
Rojek J. 2523
Roll M. 3209 3320
Rollin A. L. 6781
Romanenko N. G. 5297
Romanov A. O. 4122
Romanov V. V. 4902 8030
Romanov V. Ye. 4531 6757
Romanova M. G. 1230
Romanova T. A. 8077
Romashevskaya N. M. 241
Romashkina G. A. 4093
Romer W. 6471
Rompf K. 3621 4451 4458
Rongxiang L. 1453
Ronner R. M. 5218
Rooney P. 8849
Roos A. 4027 8065
Rosanas J. 1291
Rosca M. 3566
Rose P. W. 4309 6716
Rosen B. W. 1080 7827
Rosen M. J. 4402
Rosenbaum J. 6286
Rosenblum A. 501 617 629 1344 1347 2935
Rosenthal H. 2641
Rosenthal N. E. 8621
Rosenthal R. 2626
Roskin E. S. 8061
Roslansky P. F. 8885
Rossbach V. 7060
Rossi V. 100
Rossignol J. M. 907
Rotenberg Z. L. 4750
Rotermund M. J. 981
Roth K. 4454 4455
Rother K. 221 2571 3432 3450
Rothermel C. E. 6318 8432
Rothwell E. 2316
Rottenbury R. A. 159 5458 7806
Rouette H. K. 493 2713 5214
Rouette H.-K. 6106
Rousseau P. 751
Roussel L. 380
Rousselle M.-A. 7276 8886 8888
Roussin-Moynier Y. 1151
Rouvillain J. P. 6118 6926
Roven'kova T. A. 97 7324 8063
Rovenskaya O. S. 5198 5298
Rovinskaya L. P. 238 242
Row K. 3056
Rowe R. K. 7830
Rowland S. P. 2411 7929
Roworth Z. 1371
Roy C. 2231
Roy D. 4142
Roy K. 6808
Roychoudhury A. K. 4422
Royer X. 6418
Rozelle W. N. 1931
Ruben G. C. 4004
Ruben H. G. 2007 2926 2986
Rubenstein M. H. 3684
Rucker J. W. 2722 3567
Rudbach J. A. 8916
Rudenko L. G. 4958 4970
Rudie R. 301 305 318 2283 2969 5040 5126 5410 5577 6027 6177 6260 7040 7668
Rudinskaya G. V. 8031
Rudolph J. 3729
Rudy J. K. 2498 8754
Rudzki J. 4913
Ruef H. 3315 3317 6555
Ruehlmann K. 5685
Ruettiger W. 4396 5215 7149
Ruffo A. P. 4273
Ruiqi C. 756 6381 7380
Rukavina I. 1846
Rumyantsev S. V. 4115
Rumyantsev Yu. D. 4731
Ruoti K. 7687
Rupp J. 4747
Ruppenicker G. F. 2782 3530 7391 8173
Ruppenicker G. F. Jr. 1298
Rush H. A. 5643
Rushforth M. A. 6807
Rusnak I. 3195 4496
Russell A. J. 6001 7497
Russell J. A. 8862 8871 8900 8903
Russo R. 7343
Rusu M. M. 8212
Rusznak I. 1976 3558 7591 7637 8359
Rutberg S. 628 1994
Ruys L. 6867
Ryabets A. I. 724
Ryabinin A. A. 4255
Ryabtseva M. Ya. 5265
Ryalov D. V. 96
Ryan L. K. 8898
Rybalka S. G. 5326
Ryder M. 5548 7287
Ryder M. L. 31 834 5614 6470 6478 7956
Rydza M. 4015
Rydzik G. 2525
Rylander R. 8868 8880 8882 8894 8964
Rymarz T. 4171
Rymyantsev A. A. 4722
Ryndin V. G. 4964
Ryokai K. 7526
Rzhevtseva Yu. I. 4845
Saafan A. A. 4404 4421
Sabnis M. K. 7415
Sabnis R. W. 7554
Sachdev S. C. 1234
Sadat A. B. 2232
Saddler J. 7258
Sadikov A. S. 8172
Sadov N. M. 230 4187 4192 4214
Sadova Ye. Yu. 5330
Sadovnika A. G. 4927
Sadykov M. U. 8010
Saeki M. 7829
Safonov V. M. 4187
Safonova T. S. 3264
Sagawa K. 1201
Sage G. N. 6265
Saha C. 6254 6611
Saha S. C. 1880 3230 3352 7985
Sahasrabudhae A. S. 3597 6878 8488
Sahu S. 7984
Saigal S. 1825
Saito K. 3485
Saito M. 1637 1896 6806 7616
Sajbel M. 2137
Sajdak B. 8296
Sakabe H. 26

Sakach L. 697
Sakagawa N. 5213
Sakagawa T. 4894
Sakai H. 4319 5687
Sakai T. 1459 2220 7082 7396
Sakai Y. 5292
Sakamoto M. 1617
Sakata I. 81
Sakata T. 2687
Sakli F. 4436 7063
Sakovich P. V. 4187
Sakran M. 4404
Sakurai K. 5717
Sala G. 6707
Salathe H. 1928
Salaun H. L. 8173
Salhotra K. R. 949 967 5811 6078
Salimov A. M. 4912
Salinger R. M. 4875
Salisbury D. M. 4650
Sallay P. 7925
Salnikov Yu. V. 492 5095
Saltzman M. 1235
Salzburg H. 4637
Samal B. B. 7984
Samoilova L. A. 4893 7360
Sampson G. P. 2382
Samsonov A. P. 4831
Samsonov V. S. 5311
Samuilova S. D. 4891 8029
Samygin V. K. 5469
Sancaktar E. 6009
Sanchez G. 8951
Sanders J. C. 2552
Sandler C. H. 5970
Sandor G. 991
Sandor N. 8400
Sanford S. 6456
Sangal S. P. 7202
Sansour S. A. 2526
Santora J. E. 5415 5565 5574 5585 6966
Sanyal D. P. 5615
Sapon Yu. A. 4914
Saptharishi S. L. V. 1612
Saraiya P. N. 7928
Sarbu P. 3962
Sarikaya M. 8055
Sarin J. C. 7031
Sarkar A. K. 983
Sarma T. S. 6537
Sarmadi A. 1642
Sarmadi M. 585
Sarwate V. V. 3436 8259
Sarymsakov A. A. 4974
Sasaki I. 8524
Sasaki K. 5212
Sasaki M. 6527 6870
Sasaki S. 2040
Sasser P. E. 6445 7047 7052 7992
Sasuga T. 292
Sato H. 6682
Sato N. 6005 8371
Sato S. 8371
Sato T. 569 6729
Satoh H. 5230
Saunders D. S. 6300
Saunders J. 7689
Sauri R. M. 1291
Sauter H. P. 193
Sauter S. L. 7998
Sauvage R. 7784
Savage W. 1136
Savarensky V. V. 745
Savarino P. 3629 6112 6911
Savchuk N. G. 6283
Savenok Ye. A. 7166
Savrikov Ye. V. 325
Savsani M. P. 4462
Savvateyeva G. G. 4236
Sawakhande K. H. 3211 3228
Sawatari C. 1655
Sawhney A. P. S. 2782 7391 8173
Sawicki A. 6773
Sawka M. N. 7734
Saxena A. 6573
Saxena A. K. 8693
Saxon T. 559 1287
Sayer B. 544
Sazhin B. S. 494 5310
Scalco M. 570 571 2055 4562 4573 6124 7007 7716
Scanlon P. D. 8870
Scarborough J. 2965
Scardino F. 1433 1801 5110 6651
Sceglov O. 4215 4221
Schacher L. 6347
Schachter E. N. 8858 8861
Schaech W. 2605 2607 3464 3466 7428 7443
Schaefer H. 3728
Schaefer J. 2050
Schaefer K. 73 5698 8103
Schafer-Luderssen U. 287
Schaffner K. 2826 3691 6165
Schaller G. 6730
Scharff D. 3540
Schaumann W. 3316 3397
Schaut G. 5970
Schechter D. 2255 3076
Scheele P. 8757
Schellenberg H. 8141
Schellenberger G. 4388
Schenk W. 2724 7198
Schenker B. 1976 4496 8359
Scherer D. 2995
Scheres-Koch I. 7127
Scherzberg H. 4718
Schherbakov P. V. 5298
Schicht H. H. 3136 3139 3140 4737 4738 6370
Schicktanz K. 2292
Schiele O. H. 7138
Schiffer G. 4392 6096
Schilde W. 3545
Schiller B. 5573
Schilling B. 1065 1808
Schlapfer K. 4423
Schlegel W. 3716
Schleicher A. 65
Schleper T. 4779
Schlichter S. 2586 3329 3434 4175 4208 5891 8709
Schlien H. 8653
Schlotterer H. 258 1091 3476 3479 4249 6710 7163 8318
Schloz E. 4099 8179
Schmeer G. 1843
Schmeling J. 530
Schmelzer H. G. 6156
Schmertmann G. R. 7838
Schmid A. 1222
Schmid H. R. 8705
Schmid T. 932
Schmidhaeusler F. J. 5902
Schmidt E. 3664
Schmidt F. 5856
Schmidt G. F. 7075
Schmidt U. 5964
Schmitt T. E. 8037
Schneck R. 5918
Schneider A. 4258 7760
Schneider G. 3473 5380 7688 8646
Schneider P. 3920 5027 5037 8251
Schneider R. J. 1017
Schneider W. 5036 5893 7413
Schneiderman I. P. 6035 8920 8929
Schock M. 3422
Schoeffer P. 8338
Schoembs W. 3890
Schofield S. 8823
Scholle K. F. M. G. J. 4306
Scholimeyer E. 2448 3630 3832 4044 4754 7176 8558 8906 8909
Scholz E. 8187
Schomakers P. 410
Schreckenbach U. 3064
Schreiber G. 4646
Schreiber H. P. 4049 8107
Schreiber M. 6984
Schreiber O. 4135
Schrempf J. 1919
Schroeder A. 3982
Schroeder M. A. 8870 8871
Schroeder W. 4484
Schroen S. 3535
Schroer K. 7878
Schroer S. 2171
Schuh J. R. 2323
Schulberger A. 3292
Schuler T. 5517 7120
Schuler T. M. 3079
Schulgasser K. 7547
Schulte K. 871
Schultheiss I. 3860 6918 7625
Schultz B. 84
Schultz B. J. 5963
Schultz D. C. 6042
Schultz J. 4265 8368
Schultz J. M. 4876
Schultz U. 3586
Schulz E. 8100 8102
Schulz G. 4470 4477
Schumacher P. 705 3973 3976 6814 8766
Schumacher-Hamedat U. 4771
Schurz J. 3306
Schutz R. A. 1436 1735 7063 8224
Schutz R.-A. 5894 6268
Schwabe C. 7883
Schwabe G. 7339
Schwalbe W. 3551 3833
Schwan R. 1848
Schwartz D. B. 2178 2179 2189 2994 3016 3095 3800 6255 6257 7126 8672
Schwartz L. 1561
Schwartz P. 7821
Schwarz E. 3444
Schwarz E. C. A. 5670
Schwarzlmuller A. 5556
Schwarzmann W. 3939
Schweers M. E. 3145
Schweppe H. 7619
Schwer D. 8489
Schwerdtner S. 3716
Schwope A. D. 7730
Scibisz Z. 4351 4357
Scola D. A. 4324
Scott H. G. 3818
Scott K. 393 2219 6222
Scott R. 4623
Scott R. F. 6315
Scoular M. E. 4543
Scriber A. 2062 3731 3746
4572 4643 7001
Seaborn D. 8867
Seal M. 8335
Sear S. B. 8202
Seastrunk C. L. 2268
Seddon R. 1746
Sedlarik J. 4103
Sedova Ye. A. 392
Seferis J. C. 8730
Segal G. 718 6174
Segawa Y. 1204 2763 6943 7571
Seguela R. 907
Sehgal K. C. 6076
Seidel A. 548 4264
Seidel M. 7644
Seidman S. 1175 2187 2191 3088
Sejkora G. 7103
Sekelj D. 2017
Sekowski J. 7854
Sela N. 2641
Selikoff I. J. 7917
Seliverstov V. Yu. 5032
Semak B. D. 309 315 4353 4678 5119 6026 6944
Semenov G. S. 536
Semenov V. A. 5120
Semenov V. I. 4187
Semigulova E. A. 704
Semin A. G. 4559
Semin A. S. 529
Semkin S. F. 6704
Semkin S. V. 7162
Senakhov A. V. 4474
Sengupta A. K. 5816
Sengupta P. 4661
Senior P. S. 7204
Senner P. 5167
Sennett M. S. 7506
Senzaki T. 1204 2763 6943 7571
Seo K. S. 1827 3513
Seoul C. 87
Serad G. A. 8037
Sergeyev V. V. 529
Serkov A. T. 3265 4839 8077
Serova M. M. 5265
Serracant J. 8139
Seshadri S. 450 452 3625 3626 6575 7615 7620
Seshan K. N. 7532
Seta J. 6924
Seth R. S. 2233
Seveost'hanov A. G. 4947
Seves A. 6275 6324
Sewekow U. 6912
Seydel S. O. 3410
Seyfullin F. M. 4751
Seymour R. B. 804
Shabanova A. K. 117
Shabarova V. Z. 4275
Shablygin M. V. 4848 7299
Shady K. E. 1895
Shaeffer C. 2841
Shaffer G. P. 8855
Shafik L. M. 1943
Shafir E. 2514
Shah D. J. 1840 7405
Shah D. L. 7552
Shah D. R. 1277
Shah H. A. 1520 2303 3596 6819 6821 7565 7583
Shah H. S. 6923 8729
Shah H. U. 7033
Shah K. 8531
Shah N. C. 6084
Shah N. J. 8830
Shah P. H. 2747 3599 6871

Shah R. 8450
Shah R. K. 6083 6818 8435 8446 8569 8620
Shah S. 2791 4493
Shah S. A. 6163 7336
Shah S. C. 8837
Shahid A. S. M. 2424
Shaikh A. J. 3213 3505
Shakra S. 5229
Shalaev V. B. 8073
Shalatonova N. Ya. 273
Shalbayeva G. B. 6803
Shalby S. E. 6273
Shalimova G. V. 4479
Shalov I. I. 263
Shambaugh R. L. 5669
Shamkhalov O. Sh. 5360
Shamsiyev M. 4092
Shanbhag V. 6664
Shang P. 6020
Shangxin J. 5646
Shanmugavasan A. 1515
Shanping S. 8538
Shantong Z. 151 6272 7382
Shanyuan W. 5703 7331 7384
Shao Z. 5702
Shaomin Z. 6622
Shaoqian C. 112
Shapilova N. D. 154
Shaposhnikov A. B. 141
Sharma B. 1249
Sharma I. C. 983 1004 4946
Sharma P. K. 3332 5699
Sharma R. 6483
Sharma R. K. 5496
Sharoff R. 1388 2148 4827 7026
Sharonova A. F. 5298
Sharp C. 4724
Sharpe G. 343
Sharpe L. T. 3845
Sharrouf A. M. 4945
Shashkova T. N. 8913
Shaul G. M. 7907 7915
Shaw D. L. 6450
Shaw H. M. 7666
Shaw T. 3662
Shay B. M. 466 3642
Shchegolev A. A. 5529
Shcherbakov A. P. 93
Shcherbakov V. P. 4144 7064
Shcherban' V. Yu. 5468
Shchetinin A. M. 4882
Shchori E. 8643
Sheikh H. R. 5779
Shekar P. C. 450
Shelepneva N. Ya. 4949
Shelubyakova E. N. 5449
Shemanayev B. D. 117
Shen J. 4370
Shen L. 6381 7380
Shen W. 1709
Shenai J. A. 8965
Shenai V. A. 1191 1216 1599 1910 1911 2399 2726 2727 2728 3183 3184 3185 3574 4400 4412 4792 6463 6504 6810 6834 6836 6837 6838 6839 7240 7241 7247 7248 7570 7572 7612 7622 7623 8477
Shenk G. 3784
Shenmei S. 138
Shepard C. L. 3530
Shepard E. A. 274
Shepherd J. 541
Sheppard D. 8892
Sherby O. D. 6004
Sherman W. F. 6783
Shershnev V. N. 4733
Shesternina G. P. 1218
Sheth G. N. 6881
Sheth M. J. 1249
Shevchenko A. A. 8071
Sheyko V. S. 4682
Shibaev V. P. 3303
Shibata A. 8597
Shibata K. 2327
Shibata Y. 838 6718
Shibusawa T. 1233 2765 6898 6908
Shibuya A. 3060 7073 7074
Shiffler D. A. 6051
Shiganova Zh. S. 703 5046 6155 6279
Shikata M. 1209 1958 3308 8493
Shilling B. 350
Shimanovskaya-Dianich L. M. 309 4353 6944
Shimazaki A. 3231
Shimizu F. 8494
Shimizu J. 882 3263 7347 8047
Shimizu T. 3248
Shimizu Y. 1209 1958 3308 3654 8019 8493
Shimizu Y.-I. 8915
Shimko I. G. 757 7904
Shimojo M. 764
Shinall K. 7735
Shinde B. K. 8156
Shingo S. 7871
Shinohara A. 7421
Shintaku S. 2527 7381 8577
Shiozaki H. 25 7926 8002
Shiozawa K. 5290
Shironina L. S. 3265
Shirtum R. P. 4270 4346 8353
Shishkina I. V. 313
Shishoo R. L. 296 1095 4691 6073
Shixin X. 7078
Shiyko I. I. 4353 6944
Shizhong M. 371
Shkop P. 7414
Shkundric P. 7307
Shlyakhov V. I. 3257 3655 4831
Shlyakhtenko P. G. 4096
Shmurak A. I. 6026
Shokol F. I. 4958
Shomakers P. 2758
Shor M. E. 4975
Shore J. 2752
Short H. C. 4777 6515
Shosenji H. 2769
Shoshani Y. 5596 8279
Shoukry A. F. 1943
Shringarpure A. W. 8137 8138
Shripka V. K. 6283
Shtern A. M. 5207
Shtut I. I. 4087
Shubenkin N. G. 3257 3655
Shude Z. 165
Shuh A. H. 2021
Shujing Z. 684 685 2540
Shukelo Z. V. 3656
Shulepova O. I. 425
Shulthiess I. 3862
Shumetov V. G. 553
Shumikhina G. V. 7913
Shutova N. Ye. 4113
Shuzhen H. 168
Shvehlova L. 8703
Sibley L. R. 7955
Sideridis E. 3519
Sidorov Yu. P. 5038
Sidorova Ye. A. 392
Sieben W. A. 3772 5418
Siegrist A. E. 3664
Sievert J. 1104
Sigli D. 6761
Sikes A. M. 4034
Sikharulidze T. A. 5192
Sil N. K. 5616
Silant'eva V. G. 78
Silkin V. N. 141
Sills G. 1109
Sills S. A. 5708
Silvero S. 8836
Silvertooth J. C. 7991
Silvetra W. 6766
Simac M. R. 7765
Simkin V. M. 96
Simmen C. 5805 7386
Simon F. T. 3850
Simonova R. V. 5207
Simpson A. E. 4766
Simpson C. L. 6452 7050
Simpson M. E. 8852 8854
Simpson M. P. J. 4768
Simpson N. 3022
Simpson P. 2384 8955
Simpson W. S. 1950
Sims G. D. 3983
Simunic A. 1647
Simunic J. 1647
Sindo K. 8625
Singh H. D. 976
Singh K. C. 7984
Singh O. P. 1300 3274 3749 4475 7009
Sinha A. K. 4142
Sinha D. K. 3600 6910
Sitaram M. S. 3521
Sitkowska J. 8873
Sitnik V. P. 3266
Sivakugan N. 7157
Sivakumar M. 7079
Sivakumaran S. 7627
Sizova T. Yu. 8029
Sjoeblom P. O. 6306
Skaternoy V. A. 531
Skelton J. 886 5674
Skibba T. 3732
Skibinski R. 5099
Skillecorn J. 861
Skinner R. 6436
Sklyannikova V. P. 377
Skolunov A. V. 97 3268
Skorka M. 4209
Skorska C. 8873
Skovoroda B. F. 5498
Skrabal P. 3963
Skripkina V. T. 1907
Skripnik Yu. A. 491
Skrobin Yu. B. 6155
Skuratnik Ya. B. 5555
Slater B. 8736
Slater K. 666 3056
Slaters A. R. 7834
Slepchenko V. I. 4479
Slepetz J. M. 6299
Slis N. 4777
Sliwinski D. 236
Sloan C. 2182
Slodowy J. 1770 4186 4194
Slott M. 646 2176 2180 3083 3803
Sluizer M. Jr. 7919
Slusarczyk C. 1634
Slyvakov V. Ye. 4943
Smantser L. P. 4915
Smarr S. L. 468 504 549 695 1487 2397 5355 6172 6407 7665
Smart E. S. 1394
Smart S. L. 5477
Smelova N. V. 5334
Smelskaya I. F. 5461
Smicala V. 8212
Smilovici A. 1017
Smirnov A. N. 4710
Smirnov A. S. 144
Smirnov I. P. 5450
Smirnova M. A. 457
Smirnova M. B. 5100
Smirnova S. V. 4444
Smirnova V. N. 4858 4889
Smith B. 1970 3959 8538
Smith C. P. 4873
Smith D. A. 59
Smith D. K. 4279 5151 6404
Smith G. 5526 7288
Smith G. A. 6812
Smith G. C. 3233
Smith G. W. 2268 5044
Smith J. E. 6017 8633
Smith L. J. 5458 7154 7806
Smith M. W. C. 1868 1873
Smith P. 5713 8676
Smith P. A. 1097 4898
Smith R. 709 4368 6190 6787
Smith T. 1656 2459 4833
Smith W. C. 1146 6426 7736 8410
Smolikov V. V. 101
Smolinsky Ye. S. 5122
Smorada R. L. 5981
Smuts S. 7550
Snape E. 8760
Snow A. W. 1046
Snycerski M. 1770
Sobagaki H. 8724 8726 8727
Sobiczewski J. 205
Sobiech D. 4007
Soboleva A. I. 5074
Soderman K. L. 7830
Soebroto H. B. 4343
Sohn H.-J. 5221
Sojka-Lekadowicz J. 4877
Sokira A. N. 55 3247 4883 8029 8030
Sokolov A. V. 4680
Sokolowicz B. 4166
Sokov V. S. 4900
Solanki R. K. 2748 2749
Solar A. 7523
Solar S. 7523
Soliman H. 1703
Soliman H. A. 4109
Soljacic I. 1846 1900 1912 1979 8557
Soll W. 4340
Solo S. 608
Solodkova G. A. 476
Solodov A. I. 101
Solomon B. 5488 6256
Solov'yeva L. N. 396
Solov'yeva T. S. 4483
Solov'yeva V. B. 4490
Soltai R. E. 712
Somm E. 2711
Sommer A. J. 7795
Sommerfeld A. 6270
Somogyvari G. 2293
Somova E. I. 5039
Son T. W. 86
Sone Y. 5560
Song K. W. 4870
Song S. K. 1603
Sonwalkar T. N. 830
Sorkin A. P. 4122

Sorokin E. Ya. 4844
Sorokin V. E. 3817
Sorokin V. P. 5131
Sotton M. 352 7084
Souda T. 1429
Souren I. 833
Sousa S. 7710
Southward G. 6101
Sovina T. N. 4095
Soyez B. 7775
Spallino M. 6962
Spamer G. I. 4303
Spaseska D. 5723
Spasov V. A. 7904
Speake S. D. 2639
Speakman P. T. 659
Spear K. 8853 8866 8872 8879
Specklin P. 5953 6021 6050 6720 6725 6728 6762 6794 7475
Speckman K. L. 7734
Spector R. 7663
Spei M. 2461
Speigel S. 2822
Spencer D. 1036 1037 2309 3480
Spencer H. H. 4765
Spencer W. 7995
Speranskaya M. S. 546
Speransky A. P. 5554
Sperling P. E. 567
Spevack R. 1319 1387 2781 2918 2929 2979 2980 2990
Spiegel S. 7863
Spindler A. M. 2985 6231
Spitsin V. M. 5313
Spitz P. H. 3276
Spivak S. M. 3839 5693
Spivey C. B. 4288
Sprague C. J. 8398
Springer G. S. 1828 1833 4321 4671 5958 6002 6010 7489 7494
Springer K. 676 2793
Sprinkle S. D. 2281 6173
Spruengliy R. 3072
Spruiell J. E. 4286
Squiers D. 1488
Srebrzynska E. 4904
Sreedhar J. 7206
Sreenivasan K. 6405
Sreenivasan S. 3219 5604
Sretenskaya G. V. 3268
Srinathan B. 283 3350 5754 6591
Srinivasan G. 3946
Srinivasan J. 5816
Srinivasan M. S. 7225
Srivastava A. 6567 6585
Srivastava H. C. 7200
Srivastava J. 2488 7594
Srivastava J. K. 3267 3290 4058 7346
Srivastava M. L. 1965 1974 2080 7648
Srivastava S. K. 6567 6585
Srivastava V. K. 910
St. Clair A. K. 7326
Stadnicki J. 4189
Stadterman R. L. 8374
Staehli U. 3401 5727
Stahl M. 1829 7498
Stahr E. H. 7238
Staicu M. 3207
Stalder H. 1703 3355 4109
Stalevich A. M. 3822
Stanchenko G. I. 7314
Stanculescu I. 1727
Standring P. N. 1951
Stangle G. C. 8055
Stanley M. 1026
Stannet V. T. 4040
Stansbury S. R. 3011
Stanton B. 1562 1571 2344
Starbird I. R. 7270
Starikovich Ye. Ye. 5297
Stark G. L. 4316
Starr J. R. 351 1363 3035 5147 6057
Starshov B. V. 4250
Stas de Richelle T. 6925
Stasiak M. 4129
Stasiak T. 149
Stasinski A. 1869
Staub S. 306 5345
Stauch G. 8721
Staufenbiel G. 3693
Stavaldiyev K. S. 484
Steadman R. G. 8708
Stearns E. I. 3847 6295
Steden T. 3905
Steele L. W. 7859
Steenkamp S. 4768
Stefanescu E. 1732
Stefanescu R. 8163
Stefanides E. J. 4377
Steif P. S. 8366
Steinhagen J. 4521
Steininger F. J. 276
Steinle D. 7194
Stepanov G. V. 5017 5106 6280 6791
Stepanova N. A. 5150
Stepanova S. M. 128
Stephens J. 3771 6996 7707
Sterling W. K. 3927 3945
Stern B. 1279
Stern G. 5178
Sternstein S. S. 7501
Stetz S. 8749
Stevens J. 5396
Stevenson R. 6195
Stevenson W. T. K. 1826
Stevison D. F. 4468
Stewart R. 6840
Stewart R. G. 4022 8005 8170
Stiefler H. 700 8773
Stipanovic R. D. 8876
Stissi G. 8284 8286 8290
Stocchero E. 3115
Stockwell M. 1110
Stodden J. R. 1559
Stoeldt A. 5068 5085
Stoichitescu L. 1905 3566 8533
Stojiljkovic D. 1763
Stojiljkovic D. T. 1762
Stokozenko V. G. 4403 4406
Stonebanks J. A. 1076
Stonebraker A. C. 1427
Storm T. D. 4586
Storozhev V. V. 723
Strakhov I. P. 492
Strazd G. 4215 4221
Strebel R. 197
Street K. N. 6001 7497
Streetman W. E. 5643
Streever D. C. 6217
Strehle P. 4937
Streit H. 3568
Streltsov B. N. 4664
Strilrever M. I. 170
Strizhevskii S. V. 7318
Strobino C. 6468
Strolz H. M. 6409 7239
Stronken G. 4709
Stuart F. 590 840 1311 2536 2631 2646 2652 2698 4818 4825 5572 6229 7400
Stuart-Smith K. 1582
Stucchi E. 5562
Stuckey W. K. 7359
Studeny M. 4229 4230
Stuge R. K. 150 4126
Stukenbrock K.-H. 3502
Stull J. O. 7732 8642
Stumm V. 747
Stump K.-H. 387
Stupica I. 1782
Stutts T. 8469
Stuyt L. C. P. M. 6785
Styalova I. K. 3286
Su K. B. 1084
Subbotin V. A. 90
Subrahmanyam K. 1729
Subrahmanyam S. V. 7471
Subramaniam V. 583 1096 1425 1585 1836 3960 4667 5818 6754 7079 7516 7517 7518 7967 8384 8385 8414 8635
Subramanian T. A. 173 945 1014
Subramanniam V. 6758
Suchkova I. N. 284
Suda Y. 7083 8392
Suddens D. 3101
Suemasu H. 2642
Suetsugu K. 8370
Suezawa N. 1619 6475
Suga C. 4692
Sugahara Y. 2454
Suganuma H. 917
Suganuma K. 7512
Sugaya S. 918
Sugerman G. 6011
Sugita H. 916
Sugiyama A. 1228
Sugo T. 3485
Sui Q. W. 3854
Sukai K. 8072
Sukan C. 228
Sukang Z. 229
Sukhinina V. M. 337
Sukhova O. V. 5473
Sukigara S. 8717
Sule A. D. 2264
Sullivan L. J. 4339
Summerour J. W. 5564
Sun C. T. 1824 3516 7824
Sun J. 8028
Sun T. 8108 8122
Sunar S. 3537
Sundar H. R. S. 5128
Sundara A. 6859
Sundaram A. 6927
Sundaram S. 1223 1937 7104
Sundaram V. 3203 3210 3212 3219 3221 3222 3929 3930 3931 5754 6941 8137 8138
Sundaresan K. 8797
Sundarrajan M. 1096
Sung K. 772
Sung W. K. 88
Supanekar S. D. 7148
Suping H. 71
Suprunchuk T. 2658
Surikova G. I. 4523
Surnina Z. A. 52
Suszek H. 4207
Sutton M. B. 5686
Suvorova V. P. 5238
Suzawa T. 6527 6870 8016
Suzuki F. 2580 2581
Suzuki M. 444
Suzuki N. 8725
Suzuki S. 1781
Sverdlova N. I. 80
Svetik N. A. 225
Svetlova L. P. 3811 4895
Sviderskii E. A. 4949
Sviiokos A. B. 5794 6090 6845 7597 7800
Sviridov R. N. 7308
Svistunova L. T. 531
Svtikova T. M. 5412
Svyatenko M. V. 5032
Swain G. M. 7921
Swan R. H. Jr. 7534
Swank G. 795 5357
Swank G. E. 3993
Swanson M. 4241
Swanson S. R. 7845
Swantko K. 4602 4708 7028
Sweeney E. J. 5960
Swiech F. 4171 4360
Swiech T. 3049 4152
Swift R. E. 3194
Sykora J. L. 8847
Sylvia G. 6766
Syrkina M. L. 8061
Szabo G. T. 7925
Szabo R. 7406
Szabo S. 713
Szabo Z. 8298
Szalatkay I. 7840
Szarlark R. 4935
Szasz S. 758
Szczepaniak L. 205
Szell M. 8581
Szivetin V. V. 4214
Szklarek R. 861 4859 4956
Szlosberg E. 3549
Szoboszlai A. 1
Szosland J. 1592 1770 4186 4194
Szuchy L. 4263
Szurovetz M. 5057
Szuryn J. 4121 4123
Tabolenko V. V. 4143
Tabushi I. 8365
Tadic T. 1968
Tadokoro H. 1650 2457
Taggart J. 3089
Tagge J. 2048 3748 3911 3952 4563
Taguchi G. 2276
Tajima Y. A. 1802
Takacs J. 266
Takada K. 2471
Takadera M. 8706
Takahama K. 8724 8726 8727
Takahashi A. 2454
Takahashi J. 69 70
Takahashi K. 1440 1722 7811 7829 8233
Takahashi T. 1618 5717
Takaku A. 882 3263 7347 8047
Takami N. 5464
Takanashi K. 3232
Takao M. 8520
Takata T. 6496
Takatera M. 7421
Takatsuka T. 8901
Takayanagi M. 8130
Takeda T. 3590
Takeuchi S. 1722 8233
Takizawa K. 1959
Talagayeva N. A. 485
Talanov B. D. 5162
Talbott M. F. 1828
Talele A. B. 1841 1842 3813 6607 6780 8710

Talley K. 1079
Talley T. H. 1844 3057 3539
Tam T. Y. 8036
Tamai H. 8016
Tamai O. 8003
Tamaki S. 8047
Tamas H. 4922
Tambieva S. P. 320
Tambiyeva S. M. 182
Tamura K. 449
Tamura T. 8391
Tan S. C. 1830 1871 6312
Tanaka D. 902
Tanaka H. 8377
Tanaka K. 5275 6874
Tanaka M. 917
Tanaka T. 4982
Tananina I. N. 7904
Tandon G. P. 6302
Taneja G. C. 7986
Tang J. 6002
Tang J.-M. 4330
Taniguchi I. 918
Tanitza T. 4689
Tannenbaum H. 7393
Tanno J. 2025
Tanny G. B. 8643
Tanwar A. K. 6600
Tao K. 5270
Tao X. 8717
Tape R. 1130
Tarafdar N. 6601
Tarafdar N. L. 947
Tarakanov V. P. 8093
Taraporewala K. S. 6163
Tarasenko N. K. 320 3394 5118 7477
Tarasov K. G. 7324
Tarasov L. A. 8042
Tarkowska S. 1851
Tarnoky F. 3202 7539
Tashiro K. 1650 2457
Tashpulatov Yu. T. 484 4164 4974
Taske L. E. 981
Tasmaci M. 3537
Tassopoulos K. 3962
Tatam R. P. 8731
Tatarnikov M. K. 7321
Tate M. L. 585
Taurat D. O. 8048
Tautenhahn K. 160 953 5861
Tavernetti D. R. 1070
Taylor D. S. 2437
Taylor G. 2977 7146
Taylor G. W. 1231
Taylor H. 1572 3896 5551 6335 7229
Taylor J. K. 647 649 650 1431 2198 2201 3017 3018 8662
Taylor J. M. 3584
Taylor M. E. 1691 8006
Taylor R. A. 7049 7051 7054
Teague E. 2288
Teasdale D. C. 2209 5622
Teeter L. 8756
Teghtsoonian E. 1145
Teixeira R. A. 7731
Tekaat T. 4026
Telegrin F. Yu. 5309
Teli M. D. 1240 1249 1251 1938 1969 2791 4493 6865 6869 6931 7632 7635
Telysheva A. F. 8077
ten Hoevel B. 2165 5439 6248 6249
ten Kate H. J. G. 6129
Teodorescu I. 3462
Teodorescu M. L. 8344
Tepes G. 2301
Teply J. L. 1142 6298
Tera F. M. 1895
Teraji K. 5201
Terao H. 5284
Terekhov A. I. 110 4081
Terent'yev O. A. 233 5015
Terent'yev V. I. 199 4204
Tereshonok P. S. 50
Terji K. 569
Terlemezian E. 864
Termonia Y. 8676
Ternovaya A. S. 320 5118 7477
Terras G. 6644
Tesei C. 8120
Testa G. 6275
Testore F. 6627 7230 7410 8818
Tetla M. 202
Tetziaff G. 954
Tevlyashkina L. I. 5301
Tezer L. 6645
Thakore K. A. 8482
Thamburaj V. 4452
Thaplawala A. R. 5484
Tharion W. J. 7733
Tharp C. 8679
Thatte V. 7148
Thea A. J. 6079
Theihsen H. 6634
Thibodeaux D. P. 15 6473
Thies G. 2331
Thim D. 2108 2140 2142
Thiroine C. 3134
Thomas B. P. 8347
Thomas E. L. 2483 2484
Thomas F. J. A. 8947
Thomas J. W. 2485
Thomas M. 2475 6751 8032
Thomas R. W. 7535
Thomas U. 5774
Thombre D. G. 5791
Thompson A. 8889
Thompson B. 2209 5622 7808
Thompson J. 506 508 512 513 1281 3697
Thompson W. B. 7704
Thorson L. 469
Thrall R. 8893
Tidjani A. 7343
Tidrick S. L. 6140
Tiefenthaler A. M. 7492
Tikanova L. Ya. 4883
Timari I. 2293
Timatkov A. G. 5220
Timbie S. E. 6863
Timm D. C. 8232
Tincher W. C. 274 2561 2656 7911
Ting H. Y. 873
Ting T. C. T. 6301
Tio H. 1136
Tipping G. 1052
Tiranov V. G. 7334
Tischbein C. 417
Tishin P. S. 5038
Tiwari R. V. 1520 2303 3571 3596 6819 7583
Tkachenko L. M. 3265
Toader O. 1748
Tobukuro K. 4336
Toda H. 2736
Toepert G. 6952
Tokareva L. G. 8062
Tokura S. 8389
Tolia A. H. 6504
Tolkachev Yu. A. 7337
Tolkacheva M. A. 5325
Tollackson R. 3805 4717
Tollkuehn D. 3906 7431 7433
Tomari K. 1085
Tomasini E. 6501 6604 6620 7111 7886 8215 8426 8792
Tomasino C. 475 670 1970 4591
Tombaugh P. J. 698
Tomer J. F. 3893
Tomes P. 8666
Tomihara K. 5288
Tomin N. G. 5017
Tomka J. G. 5708
Tong S. 5652 5716 7849
Tonkoshkyrova L. V. 4248
Tooley M. 8728
Toon J. 8532
Topf W. 160 2495 3323 3366 3917 4728 6284
Topiwala N. 2791 4493
Toritsyn S. V. 4195
Toriumi K. 8706
Toriumi S. 2770
Tornberg N. E. 4672
Torpey A. S. 631 3794
Townsend M. C. 8875
Townsend R. B. 4768
Townsend T. 7218 7270
Traceski F. T. 4315
Trask B. C. 7845
Trask-Morrell B. 690
Trask-Morrell B. J. 1185 2794 6143 7640
Trauter J. 3414 4162 4681 5841
Traveria A. 7088
Travis A. R. 4314
Travis A. S. 7617
Tray A. I. 522 5404
Traynard O. 5896 7423 8278
Treiber E. E. 3313
Trenina O. A. 486
Tret'yakova O. N. 337
Trethewey B. R. 6303
Tribble G. W. 8856
Trifonov A. I. 423 4497
Trivedi P. K. 1216 1520 2303 3571 3596 6819 7583
Trojan M. 3627 6919
Trollip N. G. 7592
Troost G. H. 7792
Trop D. W. 4329
Tropper V. 3740 4372 6999 7001
Trossurelli L. 1477
Trounson M. E. 7575 8170
Trovati A. 6149
Troy C. 2194 3008
Truevtsev N. N. 4096 5130
Trukhan G. L. 599
Trushina T. M. 5330
Tsai J-Y. 4349
Tsai L. W. 3856
Tsangarakis N. 1832 6299
Tsar'kov G. A. 3268
Tsarevskaya I. Yu. 4052 5143
Tse M. K. 7541
Tse M.-K. 7816
Tselovalnikova N. V. 498
Tsirkina A. L. 4900
Tsitovich I. G. 5063
Tskhadadze O. G. 5082
Tsoi B. 3262
Tsubokawa N. 5560
Tsubouchi K. 2664
Tsuchida K. 3037 8632
Tsuchiya I. 1621
Tsujisaka Y. 185
Tsukada M. 23 25 1618 1620 8002
Tsukahara Y. 6682 6718
Tsutsumi N. 919 6386 8918
Tsuzuku H. 8386
Tsvetkova V. A. 150 4117
Tsybrankova T. I. 4664
Tsygankov Yu. V. 5026
Tubin A. A. 4196
Tucker E. E. 7219
Tucker N. 2703
Tucker P. A. 5696 7282
Tuculescu F. 3218
Tudor A. 4228
Tukada T. 2680
Tung C. M. 1048 4326
Tura J. M. 837 7088
Turaev A. S. 4974
Turner G. L. 4655
Turner G. R. 1206 6246 7563 8475
Turner J. 475
Turner J. A. 6214
Turner J. D. 473 4486
Turner R. M. 1050
Turner S. 6305
Turner T. R. 28
Turpie D. W. F. 1190 1450 1721 3044 7284 7364
Turton R. K. 6606
Tuttle M. E. 7823
Tuxford A. F. 8908
Tyagi G. K. 967 976 3388 5811 6078 6600
Tyndall R. M. 384
Tyomkin I. 6054
Tyshchuk S. P. 7170
Tyshkun A. P. 7171
Tysser H. 2161
Tyuganova M. A. 8093
Tyumenev Yu. Ya. 363 5102
Tyurin M. P. 5530
Tzimbalyuk V. N. 520
Ubbink W. H. 6315
Uchida T. 6898
Uchiyama S. 2701 5464
Uda T. 1435
Udagawa A. 292
Ueda M. 916
Ueda N. 6880
Ueda S. 6746
Uehara M. 5213
Ueno H. 2037
Ueshima M. 7016
Ueta S. 8130
Uhrich K. D. 7910 7920
Ui T. 6816
Uibel B. L. 7779
Uies W. 1765
Ukidve A. 5455
Ukidve A. V. 3350 3398 6614 7809 8683
Ukponmwan D. O. 2739
Ukponmwan J. O. 3063
Ul'yanova Z. V. 482
Ullmann L. 606 624 627
Ullyat J. 286
Ulshoefer H. 6906
Ultee A. J. 4043 8075
Umbach K. 1139
Umbach K.-H. 3838 4669 6790
Umblia P. 793
Umeda A. 2319
Umehara R. 838
Umekawa C. 444
Unger J. 3506 3677 4023
Ungermann E. 437 5249
Urakawa H. 6924

Uralskaya S. L. 4126
Urazov N. 5157
Urazov N. Kh. 5157
Urban M. W. 7297 7492 7538 7798
Urehata T. 3053
Urgel J. de L. 2390
Usenko V. A. 4917 4943 8219
Ushakov V. G. 3392
Ushida S. 598 8629 8634
Ushio S. 4777 5655 7005
Uspsskikh S. M. 4115
Ustinov B. D. 127
Utkin V. V. 7913
Utkin Yu. M. 4997
Uy W. C. 4871
Vachon G. 2235
Vaickus M. J. 677
Vaidya A. A. 3301 4852 7346 7594 7595 7974 8517
Vaidya J. 6941
Vail S. L. 7639
Vainu M. 5116
Vaishnav H. N. 8729
Valente B. 2546
Valia A. T. 6850
Valiev A. 8010
Valisetty R. R. 6319
Valladolid B. C. 2869
Valldeperas J. 7556 8505
Vallianos C. 1831
Valo G. 3451 8254
Valour G. 6676
Valsangkar A. J. 6778
Valtcheva E. 1648
Valu F. 1905 8533
van Aerle N. A. J. M. 4064 4334
Van Blaricum T. J. 6300
van Breen E. 1108
Van De Bogart W. 2284 4512
van de Bogart W. 7661
van de Loecht M. 33
van der Bom D. 330
van der Merwe J. P. 4953 4991
van der Sluys L. 7093
van Dreumel W. H. M. 687
Van Gelder L. 1025
van Laar K. W. 5862
van Luijk C. J. 836
van Os N. M. 2082
Van Parys M. 4436
van Peursem K. T. 7275
van Rensburg N. J. J. 7592
van Santvoort G. P. T. M. 7792
van Wersch K. 4502 5248 8563
van't Hoog L. S. 7780
VanderVoort J. 1541
Varadarajan P. V. 3211 3228 3806
Vardanyan Sh. S. 187
Varga I. 158
Varghese J. 1214 1975 3597 6878 8488
Varlan G. 1784
Varma D. S. 5712
Varma I. K. 7278 7999 8517
Varwig J. 3860 3862 6918 7625
Vaselov V. V. 4523
Vasilchenko V. N. 5468
Vasilchikova N. V. 180
Vasilishina N. P. 309 4353
Vasilopoulos V. 1323 2910 2912 2915
Vasilyev N. M. 6731
Vasilyev P. M. 6279
Vasluianu N. 3207
Vass G. 7436
Vass K. 1535 2508 2593 3074 3117 3157 3200 3594 4553 4729 5009 5802 5921
Vass L. 8645
Vasudev K. 1251
Vasyun'kina L. A. 93
Vatsala R. 7513
Vaughn E. A. 6013
Vausdev K. 1969
Vautrin A. 1870
Vayner I. I. 4992
Vedeneyeva G. I. 4943
Vedernikova L. G. 37 4975
Vedula M. 982 2640 3515
Vekassy A. 5057
Veleva S. 864
Velichko Ye. M. 534
Velin M. G. 5095
Veljkovic-Lazic B. 5632
Veltmaat F. T. G. 2082
Veluswami M. A. 3815 8739
Venediktov M. V. 551
Venkatakrishnan S. 6945
Venkataraman A. 7081
Venkataramanan S. S. 1472
Venkatarayan K. 6727 6798
Venkatesh R. 1251
Venkatesh V. P. 1938 1969
Venkatraj R. 5184
Verdeau-Truffier C. 1081
Verga M. 7872
Vergote F. 4725
Verkhotina L. N. 3966
Vernon S. N. 1447
Verschoor K. L. 7535
Verwohlt H. 8682
Veselov V. V. 5384 6196
Vestergard B. 346
Vetchinin D. V. 4504
Vetrova Yu. N. 4096
Vetter S. 1790 5945
Viallier P. 2500 3137 6960
Vialon R. 3414
Viazmensky H. 4295
Vidurashwatha K. L. 1712
Viertel R. 2511 8226
Vig A. 1976 4496 7591 8359
Vigo T. L. 477 2792 4299 6062 6068 7335 7642
Vijayeendra M. K. 5128
Viktorov V. N. 263 4240
Vikulin P. D. 5554
Vilesova S. N. 4837
Vincent J. H. 8907
Vincourek V. 2014 2036 2832
Vinegar A. 7309
Vinogradov B. A. 533 4546 6981 7361
Vinogradov Yu. A. 56
Vinogradova G. I. 423 4497
Vinokurova T. D. 99 7922
Vinzanekar S. G. 5754
Virker L. S. 4082
Virker Ya. S. 4275
Viscardi G. 3629 6112 6911
Vishnyak G. P. 5198
Vishwanathan G. 8683
Visileanu E. 3320
Visinescu M. 1732
Viswanath C. S. 4053 6638
Viswanathan G. 3398 5455 6614 7809
Viswanathan N. V. 7206
Vitols R. 8794
Vittoria V. 7343
Viviani F. 1933 1948 1949 5831 6852 6920 7880 8428 8537
Vizzini A. J. 2684
Vladimirova M. P. 4872
Vladykina V. P. 154
Vlasenko G. F. 7360
Vlasov I. M. 8095
Vlasov P. V. 213 228 5035
Vlasova N. A. 5096
Vlasova R. V. 8095
Vlasyuk T. I. 701
Vogel R. 5180 7557
Vogelsang-Eastwood G. M. 1380
Vohra J. N. 6846 8209
Voight R. 2091 2506
Voilukova G. A. 4975
Voitsler V. G. 8009
Vol'f L. A. 80
Volchek A. M. 101
Volf L. A. 5679
Volk H. 3891 3892 7864
Volkhonskaya N. S. 476
Volkov L. A. 4843
Volkov V. Z. 56
Volodicheva N. O. 616
Volodin V. I. 3265
Volokhina A. V. 4883
Voloshchenko V. P. 237
Voloshina S. G. 6157
Volovelksy I. L. 5371
von Bila-Natzmer S. 401 3563
von der Eltz H.-U. 2757 4426 6892 8501 8506
von Falkai B. 8069
von Kempski I. 4629
von Thenen M. 2594 4106
Vontell J. H. 4324
Vora H. R. 3436 8259
Voronin G. I. 4250
Voronin S. Yu. 5026
Voronova E. V. 94
Vorozhtsov G. N. 425
Voskamp W. 7528
Voss H. 293
Voznyuk G. F. 5033
Vrbanic S. 1979
Vualu F. 3566
Vuillaume A. 1062
Vuk-Pavlovic Z. 8862
Vukov A. J. 8367
Vuljanic B. 1606
Vuong R. 6467
Vyas I. 8866 8872 8879
Vysotskaya Z. P. 83
Vysotskii V. N. 7341
Wada K. 577
Wadsworth L. C. 4285 4288 5667 6147
Waeber R. 3401 5727
Waeckerlig H. U. 5495
Wagner J. R. 3499 8416
Wahba F. T. 7997
Wahhoud A. 1769 2594 4220
Wahid A. 2529
Waite S. R. 6265 8731
Wakelyn P. J. 7193
Wakida T. 489
Walash E. R. 7274
Waldrop R. 7579
Walker C. 3058
Walker R. P. 1739 2563
Walker W. 8487
Wall J. H. 8859
Wallimann H. 2015 4533
Walliser R. 5225
Walls G. W. 835 2435 2436 3237
Walowit E. 1197
Walsh I. D. 7793
Walsh W. K. 6076
Walter P. 1886
Walton M. 3864
Wandschneider K. 7759
Wang C. 397
Wang H.-H. 1254
Wang L. 8268
Wang Q. 8177
Wang S. F. 4314
Wang S. S. 2642
Wang Y. 1168 8110
Wanger B. 341 3773 4387
Wanger M. 341 3773 4387
Waraich Ch. M. A. 3070
Ward D. 940 1001 1152 1154 1595 1875 2001 3481 4514 5145 5505
Ward D. J. 855 859
Ward I. M. 6541 7301 8104 8427
Ward R. L. 1800
Ward R. S. 6055
Ward S. 5526
Ward S. G. 4222
Ware M. 5093
Ware R. S. 4822
Wareham J. R. 980
Warfield C. L. 1278 2151
Waring P. 345
Warner M. 3066
Warnke R. 1297
Washino E. 6682
Wassink J. G. 1182 7576
Watanabe S. 7016 8159
Watari Y. 7843
Waters M. T. 1468
Watkins B. 3721
Watson J. 1367 4794
Watson N. 3050 3831
Watt J. 2433
Watzi A. 53 355 3497 5977 8058
Wawner F. E. 1797
Way W. 8666
Wayne M. H. 7531
Weatherhold R. C. 8373
Weaver J. W. 651
Webb J. J. 1295
Weber C. 8393
Weber E. J. 7914
Weber H. 8458 8459
Weber K. C. 8884
Weder M. 1354
Wedgewood A. R. 1049 1084
Weedal P. J. 7550
Weedon G. C. 8036
Wefers R. 2799
Wehlow A. 4690
Wehmann M. 278
Wehner J. A. 2662 8732
Wehr H. 7817
Wei C. 2318
Wei T. 766
Weichang C. 7182
Weideman E. 3044
Weidner-Bohnenberger S. 8758
Weil A. 8222
Weinberg M. 689
Weiner E. 8584
Weinfeld-Berg A. 4600
Weinrotter K. 3251
Weinsdoerfer H. 217 4188 4213 4216 5889 6661
Weintraub E. 502 708 6965 7676
Weis C. D. 2329

Weis D. H. 2408
Weiss A. 7133
Weiss W. 7091
Weissenberger W. 3454 8223
Weitang H. 656
Weitzman J. 5514
Weiyi Z. 471
Weizhen P. 5031
Welch C. M. 7641
Welck K. V. 3787
Welham A. 1941 2750 5222 5223 6115
Welham A. C. 6895
Weller C. S. 5443
Weller E. O. 503 550
Weller S. C. 2155
Wendt D. 7771
Wenger B. 4632
Wenger D. 4561
Wenhui T. 2507
Wenliang T. 6375 7902
Wenlong C. 2592
Wenqiang W. 5702
Wentworth S. E. 7506
Wentz M. 2859 7626
Wenxing C. 6476
Wenzhi Z. 5608
Werber F. X. 3220
Werle-Burger H. 3790
Werminghaus H.-P. 2011 3829 7123
Werner G. 7525 7839
Werner H. 1117
Werner J. 4097 4100
Werner M. 3979
Wesolowski E. 4351 4357
Wesson S. P. 8026
West M. H. 7626
Westerman R. A. 7483
Westmoreland D. J. 8007
Wey P.-S. 6147
Weyrich G. 7133
Whaley W. M. 447 448 1946
Whall K. 7574
Whall K. W. 8465
Whan R. B. 849
Wharapa T. P. 664
Wheatley B. 1039
Whitaker A. 3639 6905 8523
White C. F. 5985
White E. F. T. 6469
White H. 1125 1866 2535 2761 3458 4515 5241 8291 8589
White J. 3376 8667
White K. 7121
White K. A. 6055
White M. L. 5985
White R. G. 5969
White W. M. 6760
Whiteley K. J. 852 856 3240
Whitfield T. W. A. 3583
Whitmore P. M. 2771 8917
Whitton C. L. 7222
Wickramanayake D. 2413
Wiczynski M. E. 2859
Widmer U. 5494
Wieland R. 4950
Wierks P. 2271 6337
Wiese D. R. 3061
Wiesel W. 993 8067
Wigger H. 8529 8530
Wightman J. P. 2644
Wilcock A. 398
Wilcox R. C. 4331
Wilde C. 4817
Wiles D. M. 8101
Wilhelm H. 3661 5179 6500 8542
Wilhelm W. T. 2278
Willburger H. 7882
Willcox D. 1407
Willems D. 405
Williams A. 6430
Williams D. C. 987
Williams D. J. 4073 4327 6719
Williams E. T. 5474
Williams K. 6971
Williams L. W. 8924
Williams M. 4466
Williams M. P. 5959
Williams N. D. 6775 7838
Williams S. D. J. 59
Williams V. 3106
Willibey G. 7780
Williford J. R. 2407 6442 8001
Willis A. J. 8374
Willis R. 2246
Willis R. J. 1134
Willway T. A. 5969
Wilms G. 4720
Wilner R. 1568 2809
Wilson A. M. 3102
Wilson A. W. 4541
Wilson D. K. 1713 8217
Wilson F. C. 7117
Wilson H. D. 4625
Wilson I. 3006
Wilson J. A. 1507
Wilson K. 7387
Wilson L. J. 4777
Wilson P. A. 581 6034
Wilson T. W. 7490
Wiltshire T. J. 3583
Wimalaweera W. 217 4216
Wimbush J. M. 3065
Wimmer A. 3315 3317 6555
Winger C. 8957
Winger R. 8957
Winkel J. D. 4335 8711
Winkler U. 660 8720
Winnik F. M. 6917
Winstead R. 6071
Winter P. 7936
Wirth E. 4199 5014 6670
Wirth W. 3496
Wirths W. 1692 3326
Wisniak E. 2145
Witczak E. 4290
Witek T. J. 8861
Witek T. J. Jr. 8858
Witkowski I. 1550
Wlay A. 5152
Wlochowicz A. 1634 4011 4047 4065 8296
Wnuk J. 1733
Woerner H. P. 3918 7664
Wojtysiak J. 4759
Wold K. 4488
Wolf B. 942 5739 8149
Wolff G. 3996 3997 7980
Wolfrum J. 4213 6661
Wolkowicz K. 4035
Wong J. M. 3150
Wong S. 7320
Woo S. S. 8707
Wood B. R. 2156
Wood E. J. 8006
Wood G. 4333
Wood K. 676 2793
Woodings C. R. 59
Woodley R. 1541
Woodroffe J. A. 381 6896
Woods D. W. 8104
Woolfenden J. 1693 3359 4924 4938 4954
Woollin R. 8734
Woolliscroft D. 1544
Wormsbaecher D. 3860 3862 6918 7625
Worthey J. A. 3587
Woywod A. 4636
Wray G. R. 4961 8794
Wrennall L. M. 5185 6087 6088 6841 6842 8464
Wright H. 640 2185 2186 2192 2193 3002
Wright W. D. 679 1917
Wrigley N. E. 6777
Wroclawcki Z. 4169
Wu D. T. 720
Wu H-Y. T. 4671
Wu H.-Y. T. 7489 7494
Wu S. L. 1437 1439
Wu Y. C. 1825
Wu Y. T. 2643
Wu Z. 8110
Wu Z.-Q. 4060
Wudl F. 5713
Wuensch G. 4296
Wulfhorst B. 1690 4948 8200
Wunderlich K. 3951
Wusik M. 676 2793
Wustrow K. 6675 6690
Wuyun G. 5645 7802
Wynne R. M. 8823
Wyrick D. A. 2635 7504
Xaixiong X. 6373
Xhilian T. 5695
Xianging L. 6890
Xiao C. 6375 7902
Xiaoxing K. 27
Xie Q. 3058
Xin L. C. 8706
Xinghua F. 204
Xinyuan S. 5658
Xiongjie L. 106
Xiren Z. 2745
Xiuge W. 6387 7924
Xiuhua L. 1915
Xiuye Y. 125
Xuerong F. 429
Xueying C. 5658
Xugang Y. 5702 5706
Yablochko L. P. 3967
Yabuki K. 1449
Yadav R. N. 971
Yagami K. 2769
Yagi T. 1927 3652
Yagupolskii L. M. 1907
Yagya K. 7366
Yahata N. 1859 7077
Yaida O. 2680 6238
Yakopson S. M. 3296
Yakovchenko G. I. 7325
Yakovleva Ye. A. 5529
Yakubauskayte R. K. 200
Yakubov D. 4092
Yalcin N. 1083
Yalinich S. M. 4212
Yamada E. 26
Yamada H. 7347
Yamada K. 2769
Yamada T. 1353
Yamada Y. 8609
Yamagishi H. 3485
Yamaguchi I. 5283
Yamaguchi S. 3279
Yamaguchi T. 24 2633
Yamaguchi Y. 1620 1960 6908 7647
Yamakawa M. 1422
Yamamoto M. 1435 8423
Yamamoto S. 8392
Yamamoto T. 1440 2527 7381 8577
Yamamoto Y. 917
Yamana N. 8625
Yamanaka T. 8117 8392
Yamanouchi T. 7526 7844
Yamashiro S. 8125 8131
Yamashita S. 6007
Yamazaki T. 1047
Yamazaki Y. 1074
Yan H. 8699
Yan X. 8240
Yanagawa T. 920 1437 1439
Yanagawa Y. 489
Yanagi Y. 1622
Yang C. Q. 2533 7275
Yang D.-K. 5707
Yang R. 8677
Yang S. R. 7815 8713 8716
Yang T. Y. 1825 6313
Yankov V. I. 56 4886 7329
Yanmo C. 5701 7923
Yano I. 7013
Yano M. 8551
Yano S. 2492
Yao C. K. 686 3854
Yarlagadda A. P. 4675
Yaroshevich R. A. 101
Yarullova N. A. 4087
Yasinsky B. D. 4238
Yasuda H. 6538
Yasuda K. 5219 5558 6882 6932 8456
Yasuda T. 8570
Yasuhara K. 7526
Yasui S. 8520
Yasukawa Y. 7548
Yatome C. 1228
Yatsu L. Y. 7645
Yau L. 5997
Yavorskaya E. G. 8093
Yaxiong H. 203 2289
Ye G. 8178
Yeaple F. 8105
Yefimova O. G. 310
Yefremov D. Ye. 5034
Yefremov R. D. 190
Yefremov Ye. D. 226 5029
Yegorov Yu. M. 176
Yeh J. R. 6298
Yemevyanova V. A. 4603
Yen K. 8713
Yen K. C. 7815 8716
Yen M. S. 8545
Yepishina E. B. 4117
Yeremeyev P. E. 5313
Yeremina N. A. 5522
Yeresko V. A. 5285
Yerofeyev V. S. 4355
Yerokhin Yu. F. 208
Yerokhina A. A. 5308
Yesina G. F. 5095
Yilgor I. 6055
Yimin W. 5704
Yingkai S. 741
Yip L. S. C. 2977 7146
Yoganathan A. P. 4675
Yokoi T. 8159
Yokota K. 8617
Yokoyama A. 3520 6746
Yokoyama S. 4457 5213
Yokura H. 6748
Yoneda M. 1458
Yoneyama M. 921
Yongchun Z. 7261
Yoo D. I. 89
Yoon H. S. 86
Yoon N. S. 427 1651
Yoshida H. 5212 6816
Yoshida K. 920 1007 1437

1439 2580 2581 3287 7396
Yoshikawa S. 569
Yoshimura Y. 4457
Yoshino M. 8901
Yoshitake N. 1622
Yotsutsuji A. 1085
Youndahl K. A. 8055
Young A. J. 7734
Young J. H. 5819 6304
Young R. A. 585
Young R. C. 1802
Young R. J. 6064 6548
Young S. 4380
Young T. P. M. 4768
Youping W. 1616
Youxian D. 874
Yovovich N. 1401
Yuan J. 8328
Yuan W. S. 7389 7395
Yuanji M. 1753
Yuanqiu F. 174
Yuck J. I. 1823
Yue W. 138
Yuecen D. 6750
Yuge O. 2040
Yuhong W. 218
Yumenov N. B. 4163
Yunus M. 2529 5602
Yuqin Y. 458
Yurchenko L. M. 8737
Yurgartis S. W. 2216
Yurgaytis A. I. 4356
Yuxuan L. 138 139
Yuying S. 167
Zabotina Ye. A. 4479
Zachara A. 3347
Zack C. 629
Zadlo J. 212 728
Zadoroszhnaya -. 8073
Zagaygora K. A. 6043
Zaghloul A. 1229
Zagorskii V. N. 8737
Zahlan N. 8736
Zahn H. 833 8393
Zaitsev Yu. V. 8073
Zaixiong X. 7896
Zakharchenko A. A. 186
Zakharova N. N. 4843
Zakharova T. D. 423 4490
Zakikhani M. 6064
Zakirova R. I. 7904
Zakrewski S. 4076 4658
Zakrzewska J. 1799
Zametta B. V. 5120
Zamoroli-Zane P. 383
Zamyatina N. I. 745
Zangerle E. 1685 3256 3280
Zanin A. 6922
Zanis V. M. 457
Zanyatina G. S. 4973
Zaoyun C. 5704
Zarubin V. M. 114
Zarubkina E. N. 4882
Zashchepkin A. S. 4682
Zaskorski L. 7481
Zavadsky A. Ye. 483
Zay'yalova Ye. M. 4942
Zaytsev V. P. 277 4173
Zdziennicki Z. 4169
Zehner G. F. 7729
Zel'tser Ya. V. 3392
Zeldin Yu. R. 5313
Zeller R. W. 6641 6655 7422
Zemlyakov V. I. 178
Zemtsov A. I. 704
Zemyshlyayeva L. P. 4260
Zeqing Z. 5646
Zerfass K.-Ch. 332 1887
Zernina M. G. 5337
Zeronian S. H. 368 3575 6388 8033
Zerrath M. 1112
Zezin A. B. 6803
Zhamlin S. K. 3265
Zhang H.-S. 3248
Zhang S. Y. 3856
Zhang W. C. 2214
Zhang X. D. 2579
Zhang Z. 8169
Zhao J. 8240
Zhao S. J. 7815 8713 8716
Zharikova S. Ye. 308
Zharkova M. A. 8219
Zhbanov A. Yu. 4900
Zhdanov I. N. 7318
Zhdanova A. P. 457
Zheltobryukhov V. F. 5046 7321
Zheng Y. 8169
Zhengheng X. 138
Zhenglon Z. 7924
Zhenglong Z. 6387
Zhengshu Y. 139
Zhenguang C. 470
Zheregi G. F. 6026
Zhestakova O. M. 373
Zhi W. 2212
Zhi-bai Z. 440
Zhiganov N. K. 7329
Zhigulin A. G. 4872
Zhitlukhina G. L. 8737
Zhivetin V. V. 4163
Zhizdyuk B. I. 4872
Zhmykhov I. N. 171
Zhongheng I. 499
Zhongliang W. 7331 7384
Zhongxing Z. 6387 7924
Zhorova Ye. M. 4240
Zhou H. 8122
Zhou J. 4286
Zhoubao F. 388
Zhu C. S. 1437
Zhu C. X. 1439
Zhu Z. H. 4402
Zhukov B. M. 4864
Zhukovskaya Z. N. 737
Zhuravlev L. V. 8063
Zhuravleva L. P. 4192
Zhurbin A. M. 111
Ziabicki A. 6540 8040
Zid J. 4297
Zieba J. 1785 4219 4253 8295
Zimcik D. G. 2231
Zimina T. I. 744
Zimmer J. 3650 4476 6136
Zimmer R. J. P. 8536
Zimmerman J. 4066 8123
Zimmerman R. S. 5138
Zimmermann E. 4181 5013 6673
Zinov'yev V. P. 4977
Zinov'yeva V. A. 6788
Zitser L. I. 737
Zivkovic Z. 1763
Zollinger H. 418 3248 3963 5218 6103
Zoltan P. 8208
Zongquan W. 5650 5704 7357
Zorkova O. I. 5220
Zosina T. V. 4374
Zotova L. V. 284
Zubakhina N. L. 4975
Zubkov L. V. 5313
Zubkov V. P. 551
Zuend M. 5037
Zueva O. N. 4355
Zund M. 5027 8251
Zurek W. 1443
Zuskin E. 8858 8861
Zuzanski F. 2576
Zvend M. 3920
Zverev M. P. 169 3247 5129 7913 8042
Zvonaru C. C. 3207
Zwissler U. 7432
Zymon W. 4761 4763
Zyuzina M. I. 37

TEXTILE TECHNOLOGY DIGEST

SUBJECT INDEX

Part 1

January-December 1988

INSTITUTE OF TEXTILE TECHNOLOGY
CHARLOTTESVILLE, VIRGINIA

© Copyright 1989 by the Institute of Textile Technology.
May not be reproduced without written permission.

The *Textile Technology Digest* is published monthly by the Institute of Textile Technology, Charlottesville, Virginia 22902, to provide abstract coverage of current periodicals, books, and patents in the field of textile technology. In preparing this annual index the staff endeavors to reflect correctly the contents of the original material. Printed in Charlottesville, Virginia, by Litho Artists, Inc. Annual subscription: $330.00.

SUBJECT INDEX

January – December 1988

In using this index, look under specific subjects. If the information wanted is not under a specific subject, look under a broader heading. Whenever possible, look under specific process. For example, information on the bleaching of cotton will be under BLEACHING: cotton (not under COTTON: bleaching). For fiber information not involving specific processes (as properties, etc.), look under the names of fibers. Use cross references and look at other headings beginning with the same word. The "see also" cross references are designed in part to limit the number of entries in the index for a given document; an abstract usually is not indexed under more than one group of headings joined by "see also" references. For many processes there will be separate headings for machines, as DRAWING and DRAWING MACHINERY.

ABRASION (SEE ALSO OTHER HEADINGS, SUCH AS DETERIORATION OF MATERIALS, FABRIC QUALITY, FIBER QUALITY, WEAR, YARN QUALITY AND UNDER SPECIFIC SUBJECTS, SUCH AS APPAREL, FABRICS, ETC.)
Du Pont's Tynex A 612 abrasive nylon filament fibers in Kaercher BR 400 floor scrubbing machine 3282
effects of abrasion, stretching, ironing on waterproof apparel seams 6196
linen. effects of heat-induced aging on color, tensile, abrasion, dyeability 7476
oil and grease stains on fabric. solvent applicator compounds problem by abrading fabric 8620
PA4 and PA7 aluminum oxide coatings for rotors for abrasion protection 4121
polyamide-imide and polyphenylene sulfide reinforced with short carbon fibers. wear rates and friction mechanisms 6543
rollers. simulation of abrasion, deformation, rigidity, strength, torsion, tension 4711
silk. chafing of fabrics. combination of abrasion and moisture. solution 4482

ABRASION RESISTANCE
acetate yarn. graft polymerization of acrylonitrile under gamma radiation 8010
alkaline deacidifying agents. effects on historic and naturally aged cellulosic textiles 7932
cotton fabrics. ammonia mercerized cellulose for improved physical characteristics 7645
cotton woven fabrics finished with thermoreactive resins 5306
effect of repeated launderings to uniform fabrics 7516
European meltblown microfiber embossed web, abrasion resistance due to surface veneer 5134
fabrics based on air textured yarns. SEM abrasion study 7477
fabrics, durability studies. literature review. abrasion resistance, tear and breaking strength 8385
formulaic method based on non-linear theory of elasticity, filament 4144
improved. fiber modification through use of acrylic emulsions 6152
knit fabrics, tests on IT-1M device 238
Martindale apparatus from James H. Heal and Co. tests flat woven and knit fabrics and nonwovens 5465
metallic card clothing. abrasion resistance 2502
pad-dry-cure, pad-dry-steam. dyeing techniques effect on resilience and strength abrasion retention of sheeting 1214
polypropylene fabrics in home furnishings, automotive 3549
silk, weighting process reduces fiber strength and tears are often unavoidable when cleaned 4136
silk. morphological changes after chemical treatment 8002
sized warps. weaving performance correlation through testing with A-C Eurotech abrader 3820
spunlaced polyester fabrics for sheets and pillow cases, abrasion resistance 1071
viscose linings. improvement by different weaves, N-methylol finishing 8359
viscose yarn. soft paraffin treatment effects 4965
warp sizing. Auburn undergraduate research projects. singeing, abrasion 1739
yarn testing with friction energy device 7811

ABRASION TESTING
fabric/fabric abrasion device from Textile Research Institute 6274
pull-out test from elastic matrix 7803
sized warps. weaving performance correlation through testing with A-C Eurotech abrader 3820
socks, men's. abrasion resistance measured 2145
yarn testing with friction energy device 7811

ACETATE--CELLULOSE
cellulose triacetate solutions. solvation 1637
molecular weight estimation 3966
oxidation of cellulose acetate and cotton linters to determine thermodynamic parameters 810
saponification bath for improved static, dyeability, hand. bath components 4895
solubility. effect of preparation methods 1638

ACETATE FABRICS
application of commercial ink or dye remover to stained acetate fabric, consequences 5394
stain removal with acetone cleaners 2051

ACETATE FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS HIGH MODULUS FIBERS)
cigarette filters. modified acetate tape increases selective sorptive power 8009
fibrets by Celanese. applications and characteristics 876
fibrets from Celanese Industrial Fibers, commercialized production of the cellulose acetate for specialty industrial applications 875
polyester threat to rayon and acetate. impact on apparel and textile industries 4051
saponification bath for acetate fibers. determination of iron content 3811
Tricolino from Shikobo, triacetate yarn wrapped with cotton. fabric properties 6498

ACETATE YARN
KF versus Bevaloid-400 for acetate warp, tests on both sizes 4164
Kompalen-D. polyamide and acetate combined yarns. properties 8172

ACETYLATED COTTON, SEE CHEMICAL MODIFICATION.

ACRILAN IS AN ACRYLIC FIBER.

ACRYLIC FABRICS
Courtelle Neochrome for spinning colored yarn on rotor spinners 5746
Fibers Division of Monsanto Company to extend warranty on Wear Dated Acrilan acrylic fleecewear 2881

Glen Raven's Sef-Plus flame retardant fabric for firemen and industrial workers 6735
Japanese flame retardant fiber and fabrics, end uses. treatment of polyester and cotton for flame retardant fabrics 3529
needlepunched fabric with Inidex flame retardant fiber 2689
Orlon. increasing demand in knitwear 2942
synthetics market expanding in home fashions 7040

ACRYLIC FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS ANIDEX FIBERS, MODACRYLIC FIBERS)
AccuColor from Du Pont. polymer dyed, dry spun for better wickability and washfastness 862
AccuColor Orlon from Du Pont. producer dyed, dry spun polymer dyed acrylic 2469
Acrylic Council, Rabinowitz named director, promotional and educational goals 6487
acrylic fiber manufacturing, properties, end uses, international and Indian technology 6491
acrylic fiber production and consumption in India 6489
acrylic fibers 4025
Actipore PVPI, CC, and SN modified fibers for medical use 8011
Anilana polyacrylonitrile, Chemitex-Anilana from Poland, production, types, uses 4035
Atlan asbestos substitute. Toray 8012
blends with cotton dyed at Harold Ingram's new dyehouse. Quick Response 2756
British manmade fiber industry declining, especially acrylics. executives say why 4848
British production declining [1988], especially acrylics 4847
changes in polyacrylonitrile-based carbon fibers' conductive resistance after oxidation, carbonizing 4047
characteristics of Anilana (Polanil) polyacrylonitrile fibers, spinning recommendations 4074
chemical compatibility for printing 385
Chinese plans to increase acrylic fiber production. import of United States technology and six new plants 2444
conductive acrylic fibers for antistatic carpets in computer rooms 5643
Courtaulds Inidex polyacrylate fire protective fiber. properties 2445
Courtaulds research on acrylic fibers with bactericides, porous acrylic fiber 5642
Cyanamid's Fiber Division, acrylic production and Creslan blend production 38
developments and advanced technology. advantages of synthetics 2473
Du Pont restructures Orlon division. High Trek, AccuColor products 6488
Du Pont's AccuColor orlon for men's sweaters and socks. fiber composition, production process, color line 40
Du Pont's AccuColor Orlon producer dyed acrylic fiber. state of the art coloring system. applications 1636
Du Pont's AccuColor, entry into producer-dyed acrylic market. product description, mill producers, present and future programs 39
Du Pont's producer-dyed acrylic program for home furnishings fabric mills 1639
Du Pont's Ultratech Orlon socks for athletes, acrylic fiber, properties, composition 6241
Du Pont's Ultratech Orlon, high performance acrylic fiber. properties, athletic applications 1640
dyeing with cationic dyes. dye uptake. diffusion coefficients and time lag of dye uptake 6103
dyeing. equilibrium sorption of cationic dyes by porous and regular fibers 418
electronic controls for spinning, twisting, plying, and dyeing at Amital plant 8839
end uses and markets. properties and performance 5644
expansion of Monsanto's So-Lara acrylic fiber production facility in Decatur, Alabama. fiber properties and applications 41
flame resistant polyacrylate. Inidex from Courtaulds 865
gaseous discharges from manufacture of polyacrylonitrile fibers, cleaning up waste gases 4840
gel spinning fibers from ultra-high molecular weight polymers 5665
heat treatment, effect on dyeability, glass transition temperature, tensile properties 1642
India. dry spun monocomponent and bicomponent acrylic fiber. prospects, consumption data 6489
India. small acrylic fiber-based projects for developing rural economy 7213
industry, West German. production and export trends 7330
kidney-shaped multilayer polyacrylonitrile fibers. birefringence phenomena 899
knitwear applications. Supacryl 8013
manufacturing developments. properties, extrusion, industrial applications 42
manufacturing, properties, end uses. Indian versus international acrylic fiber technology compared 6491
market outlook negative for acrylic fiber producers [1988] 6515
metalized Nitron fibers. heat treatment and humidity effects on electrical conductivity 7360
Mitsubishi Rayon acrylic fiber with very high strength for use as asbestos substitute 6490
modacrylic fibers in industrial fabrics industry. applications 5664
molecular segmental mobility and effect on dyeing acrylic fibers 4434
Monsanto completes acrylic PDF expansion at Alabama plant 809
Monsanto development programs. review 863
Monsanto Fibers, Acrilan products, Wear-Dated carpet with StainBlocker. [1987] sales, [1988] products 2
Nitril-Static copper/polyacrylonitrile anti-static fiber. production and uses 4036
Nitron. reaction with nickel during chemical metalization 4893
PAN gel fiber. surface modification with long chain salts for antistatic properties 4829
pan-acrylic fiber asbestos replacement. Atlan from Toray 8014
PAN. adsorption properties. dependence on composition 864
plasma etching changes structure of polyacrylonitrile fibers 5645
polyacrylic fibers. problems in heat transfer printing using disperse dyestuffs 7634
polyacrylonitrile fiber coated with copper/nickel 4837
polyacrylonitrile fiber production in Yugoslavia 7949
polyacrylonitrile fiber, standards and quality of Anilan produced in Poland 43
polyacrylonitrile fibers. effect of sodium dodecyl sulfate on deposition of polymeric lattices 8016
polyacrylonitrile thermal processing, oxidation levels 5723
polyacrylonitrile used in carbon/carbon composites (Trade Lit.) 7484
polyacrylonitrile used to synthesize electrically conductive fibers 5646
polypropylene fiber content in bicomponent blends determined using xylenes as a solvent 4838
projects for India's rural economy 3400
rapid dyeing systems, best dyes for use. basic dyes for acrylics, reactive for cellulose fibers, and disperse for polyesters 5268
solubility differential in the process of stabilization. testing and results 7296
spinning Velicren, properties that influence operations 1695
staple. domestic shipments increased for [1987] by six percent 894
stretch break converting. polyacrylic fiber and worsted yarns 1689
Supacryl bicomponent acrylic fiber from Indian Petrochemicals 1641
Supacryl dry spun acrylic fiber from Indian Petrochemicals. dyeing of bulky yarn, preparation 4433
testing density. influence of staple plugs 6502
testing. density with Shirley Fineness Maturity Tester. other methods 6503
Texmet. metal-coated 7295
Texmet. metallized acrylic fiber developed by Intituto Guido Donegani with applications in nonwovens 2446
thermal behavior of shrinkable fibers using heat treatments 44
Toray Industries' Atlan acrylic fibers, asbestos substitute. properties and production plans 4830
Ultratech Orlon, Du Pont's high performance acrylic fiber for

athletic sock market 2447
Vion AN-1 chemisorptive fiber. operational properties 3247
waste converted for textile applications 7199
water content and glass transition temperatures 3248

ACRYLIC FIBERS--CARBONIZED, SEE CARBON FIBERS.

ACRYLIC POLYMERS
acrylate binder concentration in nonwovens 8737
acrylate concentration in nonwovens 8737
backcoating emulsions 8352
Bayer adds dimethylformamide to polyacrylonitrile to produce antimicrobial fiber 5631
binders. fiber modification. commercial potential 6152
current and projected Yugoslavian production capacity 7949
cyclovoltametric content testing of polyacrylate bases 2448
graft copolymerization of acrylonitrile onto sisal fibers 7984
graft copolymerization of polycaproamide and polymethacrylic acid 7312
graft polymerization. acrylonitrile onto acetate yarn under gamma radiation 8010
grafting acrylic acid into fabrics of polyester fibers 4877
grafting onto cotton and dyeing with copper basic dyes 7589
Helizarin Binder FT. acrylic pigment binder for direct, resist, and discharge printing from BASF 5190
polyacrylonitrile fibers. effect of sodium dodecyl sulfate on deposition of polymeric lattices 8016
polyacrylonitrile precursors into carbon fibers. elemental, property changes 8025
polyacrylonitrile. thermo-oxidative stabilization of precursor material during carbon fiber formation 8015
polyarylates from hydroquinones. Young's modulus values 8068
polyurethane and polyacrylonitrile. morphology and mechanical properties 5652
polyurethane and polyacrylonitrile. phase inversion, dynamic mechanical properties 8122
sizing replacements for carboxymethyl cellulose and polyvinyl alcohol 8239
sizing. technical and economic advantages of powder grade acrylics 1746
suitability as precursor for carbon fiber development 8017
sulfonic acid groups in copolymers of acrylonitrile and sodium methalylsulfonate 4843
surface of Kevlar fibers modified by methylation reaction to improve adhesion to polymethyl methacrylate 8130
Texmet fibers. Ricem B 83 polyacrylonitrile fiber coated with nickel and copper for antistatic textiles 8089
toughened epoxy resins 6006
transfer printing behavior and fastness properties of acrylonitrile grafted nylon 6 fabrics 6928
wet and dry spinning. contributions to pore size, volume (Abstract) 8059

ACRYLIC YARN
acrylic/viscose Siro spun yarns. effects of staple length, fiber denier, and strand spacing on properties 6600
breaking strength and extension in viscose blends 5811
Dunova modacrylic fiber in multilayer athletic fabrics 3280
Hacoba HB-2000 continuous yarn shrinking and bulking system 2532
heat setting. influence of temperature and length of treatment on acrylic/polypropylene yarn characteristics 7385
Indian. applications in Indian knitwear industry 8937
Monsanto's CyFana acrylic sweater yarn at Yarn Fair. other products, market expectations 6492
open end spun. influence of three extraction nozzles on yarn diameter and hairiness 950
P-75-ShG ring spinner for wool, polyacrylonitrile, wool blends 4936
polyacrylonitrile high bulk. spun and twisted on SKF-1 and SKF-2, industrial applications 150
polyacrylonitrile self-twist, strength, relation to nip length 7064
rotor spun yarns. assessing total twist from apparent yarn twist and yarn strength at theoretically null twist 970
spinning, open end. effect of yarn extractive device nozzle on loss of twist 2510
steam-relaxation treatment of viscose blends 6078
strength and twist 3387
Superba Type WP/FU machine for steaming high bulk acrylic yarns. design and technical characteristics 2531
Superba WP/FU steaming/shrinking machine for high bulk acrylic yarns 3678

ADHESIVES (SEE ALSO OTHER HEADINGS, SUCH AS FLOCKING, LAMINATED FABRICS, RUBBER PRODUCTS, SEAMING, TIRE CORD)
adhesive nonwovens as plaster substrates 3545
artificial. LLMA-M nairite modified to form bond with split's collagen and sheep fleece's keratin 5095
bandages. new production method from Braun KG eliminates disadvantages of coating 7757
bonding with thermoplastic, low melting, semi-crystalline polyester powders 1792
Grilon yarns from EMS-Grilon. heat degradable yarns used for fusible bonding and melt adhesive purposes 4979
hot versus cold, factors influencing technique selection 271
industrial textiles. thermal and adhesive bonding techniques 3508
Kevlar pulp for thixotropy and mechanical reinforcement in sealants, adhesives, and coatings 3509
linings. developing patterns for jacket linings. adhesive linings 517
medical tape properties, requirements 8360
melt blown webs. ethylene copolymer resins 5668
nonwovens attached to waterproofed fabric 8817
Nordson Nonwoven Products Group. hot melt spray adhesive delivery systems. controlled fiberization technology 1149
performance improved with toughened epoxy resins 6006
polyurethanes 6156
Porous Roll and Acu-Fiber hot melt extrusion system from Acumeter Laboratories 1260
radiation curable laminating adhesives, growing interest 5952
residues left on apparel causes spots seen after drycleaning 4594
resin binders, acrylic. medical textiles 5963
resin to web processing. meltblown 5979
seaming. high speed method with less exposure to heat 5383
strength of adhesive bonds between impregnated latex and nonwovens, influencing factors 4483
Sumiron HM-710 adhesive bandage. special solventless hot-melt process 7749
tapes. textile carriers 1819
technology discussed at AICE colloquium 6365
thermal bonding procedures using polyester fiber and adhesives 4293
thermal processing, stability of adhesive bonds examined 520
thermoplastic matrices. improved adhesion from plasma treated carbon fiber reinforcements 8026
twentieth edition of Adhesives Age Directory 4153

AIR JET CRIMPING, SEE CRIMPING, CRIMPING MACHINERY.

AIRLOFT IS AN ACETATE/NYLON TEXTURED FIBER.

AIR POLLUTION (SEE ALSO OTHER HEADINGS, SUCH AS DUST, ENVIRONMENT)
bag filter fabrics. evaluation in pulverized fuel fired boiler applications 7519
Behr exhaust air cleaning and heat recovery system 7893
carbon fiber adsorbents. cleanup of gas discharges from acetone vapor 8846
Cirnedol 9615 and 9616 from Vickers. new grade lubricating oil minimizes atmospheric pollution 3457 3953
condensing filtration air pollution system from AETELE group. system features, benefits 5544
damage, fume fading, color loss in apparel. causes, appearance 4562

emissions control, cost effective. batch dyeing and finishing equipment at ITMA [1987] 4398
Environmental Protection Agency. revised national ambient air quality standards. effects on ginning 7193
exhaust discharges from toxic sulfur-containing compounds. biochemical clean-up method 7904
exhaust treatment system for dryers from Sueddeutscher Kuehlerfabrik Julius Behr 3934
fabric filtration, mathematical model. performance prediction for baghouses 7520
filtering system for dust and lint in plants 4753
formaldehyde stripped from air to water at pH 2.0 with automated system 4683
gas chromatographic testing for perchloroethylene traces in strip cleaned air from drycleaners 5471
gaseous discharges from manufacture of polyacrylonitrile fibers, cleaning up waste gases 4840
hydrogen chloride and ammonia sorption by carboxyl-group containing fiber 7913
improvement of solvent mileage in drycleaning facilities, benefits and methods 4571
Luwa automatic panel filter (APF) used for cleaning air in spinning and weaving mills 3140
Luwa automatic panel filter used for cleaning air in spinning and weaving mills 3139
Luwa automatic panel filter used for cleaning air in spinning/weaving mills. final filtration in waste removal 3136
Pakistan. pollution from textile wet processing industry 6378
Penn International's air pollution control and heat recovery system. features 7128
solvents in West German drycleaning industry. environmental legislation 4755
strength degradation of Kevlar 49 due to stress and nitrogen oxides 4650
tenter frames, exhaust fumes produced during thermal treatment. experimental study 3137
West German textile industries and new air quality requirements 3947

ALGINATES, SEE PRINTING PASTES.

ALLERGIES, SEE ENVIRONMENT, INDUSTRIAL HEALTH AND SAFETY.

ALPRONA IS A VINAL FIBER.

ANALYSIS, SEE UNDER SPECIFIC SUBJECT HEADINGS, SUCH AS CHEMICAL TESTING, FIBER TESTING, FINISHES, ETC.

ANID IS A NYLON 66 YARN.

ANIDEX FIBERS

ANILANA IS AN ACRYLIC FIBER.

ANIM/8 IS AN ANIDEX FIBER.

ANIMAL FIBERS, SEE HAIR FIBERS, MOHAIR, SILK, WOOL.

ANNUAL REVIEWS (SEE ALSO OTHER HEADINGS, SUCH AS BIBLIOGRAPHIES, BOOKS, DIRECTORIES)
International Cotton Advisory Committee. world statistics 7994
Japan. [1984-1986] manmade fiber industry 8078
Japan. [1984-1986] surface active agent production 8783
Japan. [1985-1986] inorganic pigment production 8524
Japan. [1985-1986] organic pigment production 8525
Japan. [1985-1986] production data for dye manufacture 8515
manmade fibers import-export balance for [1987], compared to preceding seven years 8945
New Zealand. [1987-1988] wool industry statistics 8936
Pakistan. [1986-1987] cotton situation. prices. trade research 7982
sweaters, chenille-like, loss of pile due to fabric construction, when subjected to cleaning, abrasion 4599
world trade in textiles and apparel. industrialized and third world nations 8959
world. cotton. production and consumption [1987-1990]. current status and projections 8941

ANTIBACTERIAL AGENTS (SEE ALSO OTHER HEADINGS, SUCH AS GERMPROOFING, INDUSTRIAL HEALTH AND SAFETY)
adult diapers treated with copper acetate. tested for odor and bacteria problems 674
antimicrobials for textiles. preventative benefits and marketing advantages 5997
bacteriostatic fabric system for high degree of sterility 7637
Bayer adds dimethylformamide to polyacrylonitrile to produce antimicrobial fiber 5631
cellulose staple fibers. modification gives antimicrobial properties 3257
copper sulfide-containing bemberg fiber from Asahi, electrically conductive and antibacterial properties 5678
cupra fiber from Ashai Chemical 7315
endotoxins causing byssinosis denatured by various solvents 7276
LAM and LLM. steric configuration. influence on antibacterial effect 3553
microencapsulation finishes from Shirley Institute 6138
microencapsulation for hygienic, odoriferous, and fire warning applications 6148
nylon fibers containing cupric acetate with potassium salt 4863
tetraalkylammonium fluoroborates give polyester fabric antimicrobial properties 3655
Ultrafresh antimicrobial treatment for wool bedding material 5187
zeolite-impregnated. antibacterial waddings of polyester fiber 7478
zeolite. incorporated into polymer to produce antibacterial fiber Bactekiller 866

ANTIFELTING, SEE SHRINKPROOFING.

ANTISNAGGING AGENTS, SEE FINISHES.

ANTISTATIC AGENTS (SEE ALSO OTHER HEADINGS, SUCH AS CHEMICAL AIDS TO PROCESSING, HEALTHCARE AND MEDICAL TEXTILES, STATIC ELECTRICITY)
conductive acrylic fibers for antistatic carpets in computer rooms 5643
dyeing of polycaproamide granules. effect of antistatic agent 412
high polymers and copolymers, reactive properties 8542
long chain quaternary ammonium salts of hydroxymethane-sulfonic acid for polyamide yarns 4831
polyacrylonitrile fiber. retention of antistatic properties after boiling washes. reasons 63
polyethylene oxide condensates, BTRA developed. polyester 6935
radiation induced modification of polymer solutions. applications in textile finishing 4491
spin finishes. friction reduction. antistatic agents. stabilizing agent 7319
spray. Neostatic 23 from Grote for carpets 6245
Texmet. metallic fiber 5636
water soluble copolyesters as antistats for Lavsan fiber 3656

ANTISTATIC FINISHING
active diffusion dyes with antistatic agents, increased diffusion, tests 4439
carpets. Neostatic 12 from Grote 6245
PAN gel fiber. surface modification with long chain salts for antistatic properties 4829
polyester fabrics. plasma graft polymerization and ionization 1962
TCS antistatic banding developed by Severnside Fabrics, cotton and polyester woven with stainless steel 5104

APPAREL (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL--CHILDREN'S WEAR, APPAREL--MEN'S WEAR, APPAREL--UNDERWEAR, APPAREL--WOMEN'S WEAR, APPAREL MANUFACTURE, COMFORT, CONSUMER ATTITUDES,

DIAPERS, DISPOSABLES, DRYCLEANING, DURABLE PRESS, FABRIC PRODUCTS, FABRICS, FASHION, FASTENERS AND TRIMMINGS, HEALTHCARE AND MEDICAL TEXTILES, HOSIERY, INSPECTION, IRONING, KNIT FABRICS, LAUNDERING, PRESSING, PROTECTIVE CLOTHING, RETAILING, SPORTS PRODUCTS, SURGICAL PRODUCTS, WEAR)

accessories, increased interest in private label. higher mark ups, weak dollar responsible 2981
acrylic fibers. apparel markets and end uses. world fiber production 5644
acrylics. supacryl. applications in hosiery 8013
activewear fashion trends. [spring 1988] lines from New Balance and Marika Bodywear 2875
activewear, performance [1987] sales. sales and lines from various manufacturers 597
anoraks. warmth and wind resistance 6242
aramid heat resistant materials for fireproof clothing from Teijin 6031
archeology. early English costumes 1304
bagging behavior of knit fabrics. Celanese test 6238
batik. classical batik designs, apparel 1210
Belseta PS. polyester and nylon blend fabric for outerwear 6738
belts. leather substitutes. cotton/rubber, nylon 6 (Kapron), and rubber 340
Blacky of Switzerland producing apparel for cyclists 2550
Blacky sportswear production 3753
Britain's teenagers, attitudes toward apparel. advice to capture market 6236
career wear for men and women. workwear rental companies provide laundering services 8755
cashmere apparel sales [fall 1988] at retail. concerns over price jumps and plans from major department stores 2993
cashmere costs raising prices, wholesale, by thirty to forty percent 4008
chinoiserie in European textiles and costumes 521
clothing pressure and tensile properties of materials 8632
clothing structure/appearance features. inferred personality traits 8634
clothing/appearance features and personality traits. relationship 598
combustion standards. test methods. legal regulations 691
comfort in sportswear 7020
comfort of active wear under changing environmental conditions (Conf. Paper) 8633
comfort, psychological and physiological. influential factors 2085
comfort. assessment of correlation between the human body and textile materials 1354
comfort. evaluation through distance-proximity data 684
comfort. restrictions on mobility and comfort by garment types 8591
components, trimmings, molded on centrifugal force field device, parameters 5360
consumer buying patterns 1356
consumer dissatisfaction with garment fit. coping mechanisms 5418
consumer survey method to improve apparel design procedures 5406
Cotton Incorporated develops heavyweight fabric for bale bags and outerwear 2409
cotton sweater slowdown at retail affects orders for carded yarns 1305
cotton. increase in sales [1985] due to baby boomer preference 2416
Darlexx from Darlington Fabrics, elastic fabric with polyurethane thermoplastic film laminate. types, manufacture 6019
Dawson International PLC's plans to launch men's and women's cashmere coordinated collections 596
demand [1986] and beyond. population, shifts, economic trends 5563
design documentation system, analysis of effectiveness 6224
designing, three methods, for a broad-based product line 599
designs [fall/winter 1987/1988], from National Fashion House for Apparel 5407
directory of knit apparel contractors 1361
directory of knit apparel manufacturers 1360
down-filled coats. removing splotches caused by solvents 2055
drycleaning apparel made from metallic fabrics 2854
drycleaning apparel with trim, spot testing with solvents 570
Du Pont's Lycra spandex, impact on hosiery and apparel industry 3260
Du Pont's Lycra, apparel, knitting, core yarns for weaving, products from Poland 4887
DV 6 DUM warp knitter. products, uses 5082
dyeing of ready made goods. [1987] ITMA 6107
dyeing, home. Remazol dyes. applications 4426
dyeing. cotton's popularity in apparel made reactive dyeing most popular process in America 5269
Enka's Sympatex fabric. sealed polyester ether membrane for sports and leisure apparel 2480
EXSL [1987] Exhibition of Sports and Leisure. dancewear fashion trends 1366
Fab Industries' [fall 1988] sleepwear line treated with 3M Scotchguard Stain Release. capabilities 1302
fabrics engineered for athletes and active wear used for everyday apparel 4381
fabrics. Hom men's prestige fabrics for briefs, boxer shorts, pajamas, robes 2647
fashion shows in Paris for men's, women's, and children's wear, lingerie, and sportswear 2876
fashion trends at Directives [1989]. knits, colors, garment shapes 8621
fashion trends. price competition, marketing, design. highlights of Fabrex 1306
filament yarn wear comfort properties 4151
flammability, testing and test methods for different characteristics. sixty different fabrics 4361
footwear. United States market trends 1307
garment dyeing, increasingly popular concept for the domestic industry. Quick Response, shorter turnaround time 4430
garment fit and consumer attitudes 3772
Germany's new sizing system from the HAKA institute 2031
glove liners. effect on sweat rate. comfort and psychomotor task performance 2975
glove, fireman's 6239
gloves, knitting machinery, Japanese. ITMA [1987] exhibits 5066
heat transfer, determination of resistance. TGP model 4685
Hiberno-Norse headcoverings, tenth and eleventh century 1303
high performance knitwear. insulated, weatherproofed fabrics 3777
history. exhibition from Germany late Middle Ages. priests' vestments in linen and wool 4610
hospital workers and patients. designed by Chalmers University in Sweden. inspired by sportswear 3754
insulation properties, thermal. air laid nonwovens 8060
interfacings. fusible and sew-ins for knitwear. new products 4376
interlining makers, effect of trend toward softer and lighter clothing. industry executives discuss the trend 1321
interlinings. selection. applications 2821
Interstoff fashion fabric apparel show. trends in styling, fabric, design, color 1368
Interstoff Trendtable. fashion trends [fall/winter 1988/1989] 1369
Japanese companies produce fabrics for skiing 6804
jeans. baggy, rolled-up, large, cinched waist unisex look in Paris. examples of "mauvais garcon" trend 2877
jogging suit pattern. instructions and size tables 3700
Jonbil company profile. Long Haul jeans. marketing strategies 5404
kimono. collar effect on skin color 8725
Kiwi jeans, offers finger size pocket to hold condoms, safe sex marketing campaign 5405
knit fabrics [spring 1989], [winter 1989/1990]. machine developments for complicated stitches and shapes 1779
knit jerseys used in sports. performance testing 8647
knit sports apparel, casual wear [1988] from Soviet apparel manufacturers 5408

knit. polypropylene blends 1172
knitted outerwear. developments shown at ITMA [1987] exhibition 7425
knitting full fashioned knitwear on flat machines. Shima SET-092 FF 5943
laundering apparel at lower temperature ranges 3730
Levi's Shop, franchise in Leamington Spa. effect on other retailers, future franchising plans 6240
Lycra. Du Pont's expansion plans 4857
medieval man's costume excavated and conserved in Sweden 1308
men's and women's. trends for [autumn/winter 1989/1990] 7012
Mensley Group Limited. product development for knitwear company 3884
Mode-Woche Muenchen, Fashion Week Munich. apparel show's success analyzed 2132
multifunction line from A. N. Kosygin Moscow Textile Institute for young adults 5337
Olympic Games influence activewear industry, profile of skiwear, fitness, street activewear, and fleece collections 2873
origin of clothing 2878
outerwear. thermal and insulative fibers (Conf. Paper) 8708
permanent wrinkles from improper cleaning procedures 3731
physiological assessment of wearing properties. protective clothing. standardized specifications 4669
physiological assessment. pot method 4684
Piceme microfiber polyester/nylon blend composite fabric from Toray Industries 5090
pleat loss, reasons. drycleaning procedures 5397
polyester, producer colored. Eastman and Kanebo joint marketing 4860
polyester. improving comfort with fiber engineering, topical finishes, caustic soda treatment, and amination 368
polyethylene glycol bonds with fabrics. capable storing and releasing thermal energy 1255
polypropylene apparel. comfort aspects 1355
polypropylene filament yarns. worldwide production and trends 4868
prickle. allergic response versus mechanical irritation with wool clothing 6740
printed T-shirts, market outlook for [spring/summer 1988] 2879
protective clothing, Pertex 6 from English Perseverance Mill 2702
protective clothing, welding mats produced with sheet laminates and other fibers 4833
protective. Cordura anti-snake bite leggings 5988
R. H. Bruskin Associates study of American adult apparel purchasing preferences and findings 2953
rabbit hair sweaters. effect of milling and dyeing hair on garment quality 19
rainwear. waterproof and vapor permeability of fabrics on the market 7721
resist dyers of contemporary and traditional apparel and textiles. Shigeki and Shihoko Fukumoto 1402
Respi. polyester and nylon fabrics from Kanebo 6755
Rhovyl from Rhone Poulenc. chloro-fiber with improved properties 6550
Rifat Ozbek, Turkish-born London designer 2084
SCARP design and display simulation computer software from Japan 8803
serviceability standardization. labeling and care instructions with regard to consumer expectations 1309
shirt designer Ken Done, t-shirts. career and present business 2086
silk saree of Kancheepuram, India. history, tradition. silk types 8622
ski wear that changes color according to temperature from Toray 2818
skiwear fashions [fall 1988] exhibited. 34th Annual Ski Industries America Show, prominent trends 3781
Soviet apparel fabrics [1988]. designs, fashions 4385
Soviet mills. knit fabrics and apparel, fibers, designs 595
space suits, shuttle. study for the home economist 2880
spectator-wear and authentic activewear, disappearing line between. West Coast manufacturers describe lines 600
splatter dyeing as an alternative to stone washing, acid dyeing 1196
sportswear. growing market for air textured yarns with the look and feel of cotton 7386
sportswear. polyester, acetate and nylon 6 blends on warp knitters 337
sportswear. [spring/summer 1988] fashion trends 1310
static. causes and prevention 580
stonewashing. washer/extractor from Cherry Tree 1257
sweaters [fall 1988], prominent trends in styles and patterns 4598
sweaters, chenille-like, loss of pile due to fabric construction, when subjected to cleaning, abrasion 4599
sweaters, wool. avoiding felting shrinkage during drycleaning 4570
Tactel 24 Carat from ICI Fibers. polyamide fabric for high performance sportswear 6799
taffeta. removing wrinkles at cleaners 2062
tailored sportswear, fashion shift from woolens to worsteds. effect on domestic mills and international outlook 1311
Teijin and Unitika. fabric for sports apparel which absorbs and evaporates perspiration 6792
textile skills in creating marionettes and their costumes 3770
thermal behavior of clothing 601
thermal behavior of Japanese kimonos 6226
thermal behavior of men's and women's clothing 6225
thermal insulation of apparel fabric, mathematical model 5124
types for waterproofed apparel, ensuring watertightness 5384
undergarments, polypropylene. in cold weather. comfort consideration 1312
United States and China. impact of apparel imports from China 6416
United States production statistics [1987] for selected apparel 4597
viscose/polyester adhesive lining nonwovens. effects of pressing and heat 4499
Vivrelle. polyoxamide fiber for use in nonwoven apparel 1643
Wal-Mart profiled, success of washed denims. sales 2980
washable workwear. functions. fiber choice 2146
washing, foam. effect on air flow rate on detergency and cleaning ability 7011
wear properties of tricot sports apparel 5154
West German civil service, uniform and protective apparel standards testing 3838
Western Glove of Winnipeg, Canada, producing casual wear and jeans 2874
white wool garments natural yellowing 3771
wool print fabrics, multicolor, machine washable, from Ratti 1250
wool's position in knitwear market. survey of current and future 1389
woolen and worsted wool apparel drycleaning, common problems 2860
work and protective clothing requirements catalogued 7722
woven cotton fabrics, willowing and deformation. use in nonwoven linings 4680
woven fabric, moisture transfer. model for apparel comfort testing methods 5469
yarn separation in seam areas, test method, causes, stress level 5470

APPAREL--CHILDREN'S WEAR (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL, APPAREL--UNDERWEAR, APPAREL INDUSTRY, APPAREL MANUFACTURE, COMFORT, CONSUMER ATTITUDES, DIAPERS, DISPOSABLES, DURABLE PRESS, FABRICS, FASHION, FASTENERS AND TRIMMINGS, HEALTHCARE AND MEDICAL TEXTILES, RETAILING, SPORTS PRODUCTS)

AAMA charges cotton playwear is being sold for sleepwear to avoid flammability regulations 5409
Baby 16 fair. trends [fall/winter 1988/1989]. attendance, problems, exhibits, trends 2089
boys and men. knit undershirts. Soviet Union, standards for sizes and measurements 616
boys' wear. Northeast retailers report on top selling items,

acid-wash 1387
Cologne Fair, Children and Young People. [spring, summer 1988] fashions 2067
designs. General Sportswear's new children's line, Chance. advantages, production, garment dyeing 1212
Favrot. development of computer aided production system. problems 7147
Fibers Division of Monsanto Company to extend warranty on Wear Dated Acrilan acrylic fleecewear 2881
girl's morning coat. cutting pattern and dimensions 7672
handknit sweaters. designing 2885
illegal import crackdown on sleepwear, violation of federal flammability standards 6400
knits for children [fall 1988]. new fashions from designers 4600
Malina Gerber, designer, manufacturer, retailer, profiled 2882
market outlook [1988] discussed by manufacturers. various lines presented 602
marketing. consumer attitudes and industry responses 603
Mrs. Taki's Kids apparel line for children. line style, price points, sizes 2883
Pretendables, children's wear line from Presentables Cinzia 2884
Salon Internationale de la Mode Enfantine, best selling trends 2088
sleepwear. port inspection program. to intercept illegally imported Consumer Product Safety Commission 5419
sleepwear. standards for flammability in Australia 5421
Spain, apparel exports. opportunities for Europe 6232
tunics or galabiyehs excavated from Egyptian sites dating from medieval Islamic period 1380
United States production statistics [1987] for selected apparel 4597

APPAREL--MEN'S WEAR (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL, APPAREL--UNDERWEAR, APPAREL INDUSTRY, APPAREL MANUFACTURE, COMFORT, CONSUMER ATTITUDES, FASHION--MENSWEAR, FASTENERS AND TRIMMINGS, HEALTHCARE AND MEDICAL TEXTILES, HOSIERY, KNIT FABRICS, PROTECTIVE CLOTHING, RETAILING, SPORTS PRODUCTS, WEAR)

accessories [fall 1988]. trends in neckwear, belts, and hosiery 2903
activewear, cycling-inspired. from West Coast manufacturers 1317
anoraks. warmth and wind resistance 6242
athleisurewear sports/casual wear concept in Great Britain 8623
Barney's All American Sportswear Company's [fall/winter 1989] collection. dominant items 2090
Baxter International and Pianta, two men's wear lines that combine fashion and high profits. fabrics, products, price points 2887
big and tall expanding market. manufacturers describe field, attendance at Big and Tall Men's Apparel Show 1318
big and tall men. survey from United States on height, weight of sample civilian males 1590
big. British men's wear outsized specialty chain, High and Mighty. company developments, products, prices 2147
British knitwear market, trends in men's wear sales 5914
Calvin Klein opens first store in Dallas 5424
classic British men's wear. resurgence of interest. fashion trends 3761
design trends at SEHM 2905
Designer Menswear Show [1988]. fashion trends. exhibit highlights 2890
Designer Menswear Show [1988]. trends 2842
designer. Andrew Fezza's [spring 1988] collection 604
designer. Armand Basi. spin-off of Lacoste development, design philosophy, lines, sales outlets, and volume 2886
designer. Bill Robinson's [spring 1988] collection. day and sportswear lines 605
designer. British collections [fall/winter 1988]. trends 2888
designer. David Valls upscale knitwear. philosophy, product lines, target customer, growth strategy 2889
designer. Enka [fall/winter 1988-1989] designs from Rini van Vonderen 3755
designer. from Antwerp. Bikkembergs, van Bierendonck, van Noten 610
designer. Italian collections [fall/winter 1988] Milan Shows. Luciano Soprani, Claudio La Viola, Erreuno. design trends, styles 1315
designer. Italian men's wear collections for [fall/winter 1988]. Byblos, Gianmarco Venturi, Krizia Uomo 1314
designer. Italian men's wear designer collections at Milano Collezione Uomo 2092
designer. Kenzo's [fall, winter 1988] collection, trends 2896
designer. Michele Savoia's [fall 1988] collection. dominant trends 2093
designer. Milan collections [fall/winter 1988]. fashions from Armani, Ferre, Uomo, Valentino, Bublos, Gigli 2907
designer. Perry Ellis America, Portfolio, and couture [fall 1988] collections 2898
designer. Pitti Uomo Italia, conservative and avante garde fashions 3760
designer. S & Sprouse's [spring 1988] collections 607
designer. Sans Tambour Ni Trompettes collection [fall 1988] 2899
designer. suits. Paul Smith, shop owner profiled 3759
designer. Tokyo [spring/summer 1988] collections 608
designer. West Coast, emphasizing variation of classics in design 609
designer. Workers for Freedom's [autumn/winter 1988] collection. trends and fabrics 2902
designer. [fall/winter 1988] fashions from Parisian designers. trends 2911
designers and trends at Ninth Gaudi Hombre 2909
designers and trends from Paris collections. Yamamoto, Balmain, Miyake, Cardin, Cerruti, and others 2908
designers and trends [fall/winter 1988] Parisian collections. Montana, Dior, Gaultier, and others 2906
Designers' Collective, trends and highlights 2891
designers. French and companies profiled 2091
designers. Italian. Pitti Uomo Italia, designs and fabrics. show theme, styles 2094
European fashion shows, trends 2154
fabric, double warp fusible weft design for men's wear interfacings 5040
fabrics [spring 1989] forecast 5410
fabrics [spring, summer 1989]. new wool cloth types 4384
Fairchild Fact File. men's sportswear, casual wear, outerwear 8920
fashion fabrics [fall 1987], wool plaids with decorative color accents 590
fashion trends at MAB International Menswear Fair 4612
fashions [spring and summer 1988] 611
fleece crossover sales in men's active and sportswear. varied product mix needed to attract customers 2904
formal wear trends [fall 1988], preview 2912
French imports, exports and United States men's wear. French Men's Wear Federation's report 2347
Future Classics brand. new division of Bukta aimed at men's wear retailer 3756
growth in men's wear market predicted by Cotton Incorporated's president 4814
Gruppo Finanziario Tessile profile. innovations in making and selling apparel 3757
HAKA [1988] exhibition 625
hosiery styles, trends [fall 1988] 4618
hosiery, color and patterns, important to generate sales in cautious retail climate 2871
International Design Group show. trends [fall 1988] sportswear and apparel 2894
International Design Group, innovative lines, specialty store buyers. purchasing strategies 2895
International Western Apparel and Equipment show. dominant trends, merchandising strategies 1313
jackets. trends from young men's resources at NAMSB 2928
leather fashions [summer 1988] 612
leather outerwear sweaters, acid wash denims. specialty store retailers' purchases at NAMSB. [fall 1988] sales outlooks 2919
licensing agreement between Coors and Lord Jeff, men's sportswear lines under Coors Originals and Coors Light labels 1322

licensing. Amerex of California with Faberge to produce and market line of men, boys' outerwear with McGregor brand 1269
loungewear, manufacture and retailing 2913
major trends [fall 1988] jeans market. treatments and products from various manufacturers 2781
Milanovendemoda [1988] Uoma Exhibition, fashion highlights 3758
necktie, history, origins, types 5411
neckwear and accessories market [spring 1988]. trends in ties, hats, glasses, suspenders, cuff links, tie clips, leather goods 1323
neckwear market during holiday retail season and for [1988]. company lines and expectations 1324
outerwear displayed at the NAMSB show. cotton, wool, muted solids and brights popular 2915
pants size standards 5361
Pitti Uomo Italia [1987]. menswear trends [spring/summer 1988] 606
polyester linings, pros and cons. producers offer views on market situation 3294
prices, decline of United States dollar. effect on men's wear. Italian, French manufacturers. market positions 2099
Primary Colors, bow tie and cummerbund sets developed by Oxford University students 2095
prints prominent fall trend for innerwear and daywear 4607
prints. subtle and conservative patterns [1988] with brighter colors 1325
private label programs expand due to trends in retail mergers leading to closer relationship with domestic manufacturers 6169
problems and care procedures to be used when handling ties 4574
Quick Response system used by Haggar 6231
ready-to-wear. Fred Perry company profile. [spring/summer 1988] collection 2892
ready-to-wear. Gitano's plans to enter sportswear category. program details and merchandise 2893
ready-to-wear. Mighty-Mac sportswear. return of company restructuring and new collection 2897
reorders [1987] for men's outerwear up from [1986]. companies discuss their sales position 613
report on cotton market share. increase in men's retail market 7939
retail prices increased [February 1988]. United States Labor Department figures, reasons why 2989
retailers and exhibitors discuss evolution of [January 1988] NAMSB Show. popular buys 2100
retailing. mainfloor. rise of designer collections and classifications brands grouped in lifestyle formats 2914
rollpadded lapel and its re-emergence as quality symbol. KA roll padding machine 3710
shirt and neckwear styles [fall 1988] at NAMSB. trends. retailers discuss strategies to boost sales 2916
shirts, cotton dress. Van Heusen. Custom Club International, Crown, Cross 1316
shirts, dress. trend pushed by major resources 1320
shirts, sport. survey of eleven mass merchants and their sales market. sales figures. purchases among different age groups 2917
shirts. [fall 1988] styles and fabrics 2910
silk bulk yarns in fabric manufacture 8227
slacks and jeans casual strong sellers at major mass retailers during holiday season 1319
slacks popularity [fall 1988]. manufacturers' products and marketing strategies 2918
sock. dressy. market for men. patterns, price points, retail sales 1864
socks. advances in machinery. computers, electronics 4224
sport coat, fancy, business down, roundtable talks of men's wear manufacturing executives exploring question of when and why 2096
sportswear and other apparel at Big and Tall Men's Apparel Needs show. market, merchandising strategies, and products 2920
sportswear collections for men and boys from West Coast manufacturers. fall trends in outerwear 2922
sportswear directions exhibited [fall/winter 1987/1988] Uomo Moda, styles 1326
sportswear offerings [fall 1988]. retailers, merchandising strategies 1327
sportswear, continued growth in specialty stores. retailers discuss market position, and merchandising mix 2921
sportswear. success of mass merchants in moderately priced sector 2988
Steve Sakamoto and Market Research Active Sports. market analyses for men's beachwear, sportswear, and other West Coast fashions 2804
suit fabrics [spring 1989]. patterns and trends 2631
suit. history. apparel and present market position and popularity 2098
suits wool [fall 1988], preview of designer styles 1330
suits wool. retail reaction to higher wool prices 1388
suits, eight-inch-drop. retailers and manufacturers opinions of trend 2925
suits, made to measure. merchandising strategies by upscale companies 2924
suits, three button, style trend in tailored clothing market. retailers describe their product line 2923
suits. tailored and casual. [spring, summer 1988] styles reviewed 2136
Super Show for men's activewear manufacturers. crosstraining collections, stretch items, warm-up suits, color, cotton 2900
surfwear market, Action Sports Retailer trade show. industry positions and future expectations 2926
survey of major West Coast retailers, developments in knitwear 7028
swimwear and activewear, domestic. resources report possible shortage of imported cotton shorts [spring 1988] 2097
tailored clothing and increased demand. narrowed gap between domestic and imported tailored suits 3762
tailored clothing industry, American silhouette emerging. style, fabrics 614
tailored clothing manufacturers at NAMSB. trends include silk blends, fuller silhouettes, pleated pants 2927
tailored clothing market [fall 1988]. suits, sports coats, and casual wear from various designers 2101
tailored clothing [fall 1988] market, updated natural shoulder models, pleated slacks. various manufacturers' lines 1329
tailored clothing, traditional, in men's market. return to designers and fashions that helped the trend 2102
tailored clothing. United States market trends 1328
tuxedos. rental versus bought in formal wear industry 8624
undershirts, pants. knit. men and boys. Soviet Union, standards for sizes and measurements 616
underwear, fashions and basics in market 7724
underwear, sleepwear, loungewear. styles, colors, fabrics [spring 1988] 1334
underwear, thermal. styles, colors, lighter fabrics, designs from J.E. Morgan, Duofold, Jockey 2930
United States first quarter [1988] shipments. men's. women's. misses'. juniors' 8585
United States production statistics [1987] for selected apparel 4597
United States retailer buying at SEHM. European buying strategies and acquired merchandise 2901
vanishing pinstripes and loss of colored yarns in men's oxford shirts. causes, solutions 7002
wool demand and increased prices expected to continue in men's apparel market 4827
young men and boys. Megstar Le Tigre apparel. reactive dyes for color brightness 3706
young men's retail outlook [fall 1988] pessimistic. lack of clear fashion trend blamed 2929
young men's. retailers buying strategies to cope with higher wholesale prices [fall 1988] 2990

APPAREL--UNDERWEAR (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL, DIAPERS, HEALTHCARE AND MEDICAL TEXTILES, SANITARY NAPKINS AND TAMPONS)

blends of synthetic filament and spun yarns for knit underwear 4237
boxer shorts, unisex appeal for expanding market 4601
bras, educating sales people in fitting and merchandise 1331
brassieres, sizes, documentation system for production to conform to standards 5362
bridal intimate apparel, successful retail category 6227
chemise, knit fabrics. methods for cutting to reduce fabric waste 534
Cotton Tops from Round The Clock. all-in-one garment 8637
daywear and bedtime. Pitti Lingerie. major trends and fabrics for women's fashions 2103
designer. lace ready-to-wear evening fashions [spring 1988] 1332
designer. Warner's Valentino Intimo line of innerwear. licensing agreement, collection, price points 2104
fabrics [fall 1988]. trends in texture, color for intimate apparel 2661
fashions and basics in men's underwear market, best sellers 7724
girdles analyzed for wear comfort 8625
innerwear undergoing transformation in definition and usage. new products 7014
intimate apparel executives' [1988] expectations. growth categories 615
Italian intimate apparel industry. new growth and expansion. change in consumer attitudes 7723
legwear, men's underwear. [1988] buyer's resource guide to designer names, licensees 2970
lingerie. Tactel polyamide fiber from ICI in warp and weft knitted fabrics 5647
marketing, women's innerwear from Du Pont fabrics. fabric properties, potential markets 8626
men's packaging trends. boxes and pack tubes, novelty greetings, photo imagery 2105
men's trends [1988], manufacturers and retailers. description 1333
men's [spring 1988] underwear, sleepwear, loungewear. styles, colors, fabrics 1334
options in daywear and foundation wear to accompany pants fashion trend. stretch, prominent 6228
polypropylene blends. comfort parameters for sport underwear 7720
polypropylene multifilament yarns for recreational clothing 4980
prints prominent fall trend for innerwear and daywear 4607
quality control. management. knitted underwear industry 6178
resurgence of feminine lingerie with Tactel polyamide fibers. European lace and lingerie industries 3763
sexiness in lingerie, fashion trends, retail advice 8627
sleepwear, loungewear, and lingerie [1988]. dominant trends 620
support and control styles growing. market growth, expectations 8639
thermal underwear for men. styles, colors, lighter fabrics. designs from J.E. Morgan, Duofold, and Jockey 2930
thermal. Stretch Dryline from Allied Fibers 8628
thermoregulatory properties 2801
undershirts, pants. knit. men and boys. Soviet Union, standards for sizes and measurements 616
underwear. panties. preferences in styles, fabrics. buying habits 8636
use in maintaining thermal equilibrium of human body 2801
VEB Kombinat Trikotagen's improved contour, overlock and double chain sewing stations for lingerie and fine knits 3725
women's day wear, influence of short skirt. emergence of short slip, petti, and tap pants market 1336
women's innerwear [fall 1988], prints prominent. fabrics, design, style 4605
women's market survey. fabrics, styles, pricing, sales, and advertising 3765
women's market [1988]. major producers and products, competition between brands and private labels 3764
women's, styling in thermal or warm underwear from various manufacturers 2931
women's. Celanese Textile Fibers' Fashion focus for Winter/Holiday [1988]. silhouettes, fabrications, patterns, colors, themes 1335
women's. survey of how they pick out their underpants every morning. influential factors 2106

APPAREL--WOMEN'S WEAR (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL, APPAREL--UNDERWEAR, APPAREL INDUSTRY, APPAREL MANUFACTURE, COMFORT, CONSUMER ATTITUDES, FASHION--WOMENSWEAR, FASTENERS AND TRIMMINGS, HEALTHCARE AND MEDICAL TEXTILES, HOSIERY, KNIT FABRICS, PROTECTIVE CLOTHING, RETAILING, SPORTS PRODUCTS, WEAR)

accessories retail market [1988]. predictions 1339
accessories [fall 1988]. colors and major trends 2115
accessories [fall 1988]. trends in hats, jewelry, shoes, and other items 2114
accessories [summer 1988], preview 1378
adapting [1929] women's dress for contemporary use 5363
Allied Fibers' promotional campaign for new Patina nylon. application in intimate apparel 3281
athletic sock. mixing fashion and function 3778
belts, styles [summer 1988] 1340
bodywear and hosiery styles [fall 1988] 2116
bodywear category sales soar 3767
bodywear. [summer 1988] fashion trends 2937
bridal intimate apparel, successful retail category 6227
Bromley Coats' expansion program. management, products, future plans 1996
Calvin Klein opens first store in Dallas 5424
Christmas [1987] sellers from major retailers 1385
coats with raglan sleeves and accented shoulders, construction 3701
coats. instructions for women's fitted waist, high shouldered coat 3702
computer analysis based on consumer data results in improved apparel design 4603
correcting commercial patterns for women's pants to improve fit 5366
correcting women's pants to improve fit 5365
David Warren Enterprises, dress divisions. products, price points, [1988] expectations 1997
designer gloves [fall 1988], orders. leather, knits 1341
designer label licensing. Fairbrooke Enterprises. Perry Ellis and Calvin Klein women's coat collections and other new lines 2107
designer short skirts and other popular items selling at retail 2152
designer. cashmere, Seventh Avenue designers' plans [fall 1988]. coping with high prices and tightened availability 2938
designer. eleventh New York PReT fashion show. general trend, designs from Theresa McAllen and Katlean de Monchy 2939
designer. Georges Marciano's new company Misfits. collection, price points 2932
designer. Givenchy spring couture collection, Paris show profile 2140
designer. Italian [spring, summer 1988] styles, feminine lines 2141
designer. Marc Jacobs and his design career, profiled 2933
designer. Oscar de la Renta's Expressions' sportswear line [spring/summer 1988]. cotton, Lycra spandex fabrics 2935
designer. Paris spring couture collections. Lacroix, Lagerfeld, Ungaro 2108
designer. Paris [spring 1988], couture collections. early trends 1390
designer. Patrick Kelly and his designs 2109
designer. Ralph Lauren's accessories lineup, products and licensing agreements 2110
designer. Seventh Avenue fashions. daywear and eveningwear dresses, summer suits 1338
designer. swimwear fashions [summer 1988] from various sources 1348
designer. Thierry Mugler's [fall 1988] collection, prominent trends. from Rei Kawabuko, Nino Serruti, Helmut Lang 2936
designer. [fall 1988] lines from Italian designers. major trends 2941
designer. [summer 1988] offerings from sportswear, ready-to-wear, and dresses 1347
designers. fabrics. extravagant, bold. Lacroix, Chanel, Dior, Ungaro, Givenchy 2655

designers. Southern. [summer 1988] apparel 1346
dress market for sportswear manufacturers, market share. designs from various companies 2117
dress pattern with bat wing sleeves 3703
dresses. knitting machine, circular. Variatex T.E.J. 2500 unit 5072
fabric choices by female college students for apparel 2940
fabrics for women's wear [spring/summer 1989] apparel. fabrics, patterns, colors 2665
fabrics for [autumn/winter 1989/1990]. novelty cloths, color, new lingerie fabrics 7015
fabrics. wool, wool blends. pilling tests, suggested changes on standard 4359
Fashion Center's [spring/summer 1988] line, consumer reaction questionnaire 5412
Fashion Week Munich. [spring, summer 1988] styles 2139
floral look [spring/summer 1988] in accessories and prints. retailers describe their products 1391
Fortune Cookies, Bonjour, Naf-Naf lines. agreement between Perry Ellis and Yagi Tsusho 617
Gerber AM-5 CAD system for planning advance time in women's apparel manufacture 4519
handbags [summer 1988]. styles, manufacturers 1342
handknit sweaters for women whose bust exceeds forty inches 5055
hats [fall 1988]. expected sales volume, major trends 2118
hats, comeback [summer 1988] 1343
holiday apparel for major designers 5413
home television shopping successful in apparel, especially large sizes 5429
Hong Kong apparel. highlights of new lines. day and evening 3775
Hong Kong fashion shows [fall/winter 1988] preview 3776
hosiery looks [fall 1988]. influence of popularity of pants 7718
hosiery [fall 1988]. fashions influenced by ready-to-wear 4616
hosiery [fall 1988]. styles and colors in socks, thigh highs, pantyhose 2872
innerwear fashions [fall 1988]. sleepwear and loungewear 2119
innerwear from Du Pont fabrics. properties, future markets 8626
innerwear undergoing transformation in definition and usage. new products 7014
innerwear [fall, holiday 1988], prints prominent. fabrics, design, style 4605
intimate apparel fabric, nylon tricot. renewed interest. company expectations 6525
intimate apparel fabrics [fall 1988]. color, texture 2661
intimate apparel [spring 1989] fabrics. major trends 7021
intimate wear, designer. growth category for manufacturers and retailers 4604
jacket with raglan sleeve. pattern refinements for larger sizes 4528
junior sportswear retailers and manufacturers, market outlook. describe [fall 1988] fashion highlights 3768
knitwear market [spring/summer 1989]. softer, more feminine trends 2942
Kumaon, India. garment styles. skirts, blouses, shawls, ornaments 3766
large size apparel market, potential of growing category realized by manufacturers, retailers 2120
layered dressing and men's wear influence seen as prominent in Australian [spring/summer 1988] apparel 3774
legwear and bodywear manufacturers' expectations [1988]. industry outlook, concerns, trends 2121
lingerie. Tactel polyamide fiber from ICI in warp and weft knitted fabrics 5647
loungewear, summer robes. designs and fabrics from various manufacturers 2122
men's wear fashions influence on women's wear apparel noted at American Printed Fabrics Council meeting 6229
neckwear, scarves [fall 1988]. expected sales and fashion trends 2123
Nipon, Leslie Fay merger 1337
options in daywear and foundation wear to accompany pants fashion trend. stretch, prominent 6228
pajamas popular sleepwear item. styles and market outlook 4606
pant fashions [summer/fall 1988] women's sportswear. styles 2943
panty market [1988]. brands, private labels compete 3764
pantyhose resources, styles, retail prices. Buyer's Guide 8640
pantyhose. fit properties, resistance to stretch evaluation 6766
personality judged by appearance. male point-of-view versus female 8629
polyester's resurgence as a fashion fabric 6535
Pret-a-Porter show. [spring, summer 1988] fashions reviewed 2143
prints prominent fall trend for innerwear and daywear 4607
private label manufacturing in women's ready to wear market. retailers and manufacturers describe market expectations 2811
Quick Response system used by Haggar 6231
rainwear market for women. new fabrics 1392
ready-to-wear executives' forecasts [1987 and 1988]. short hemlines to help market 505
ready-to-wear trends affect hosiery [fall 1988] 4617
ready-to-wear. Chetta B, dress house profile 2126
ready-to-wear. Lacroix collection, review. strong shapes, lots of colors 2967
ready-to-wear. Montreal Pret and Collections International. vendor and buyer reaction 2934
resort retail season off to a fast start. retailers explain why 618
scarves [fall 1988]. trends and sales predictions 4606
shawls brought from Kashmir to Europe [1700-1870] displayed at de Young museum in San Francisco 2944
shawls. Russian. origins, technique, history 6962
shorts [spring 1988]. key shapes 619
skirts, hemline lengths [fall 1988]. major designers describe their fashions 2124
sleepwear [fall 1988] prominent styles, trends, fabrics, brushed back satin 2945
sportswear designs [summer 1988] from various designers 1345
sportswear fashions [summer 1988]. full pants, cropped or bare tops 2144
sportswear sales. retailers describe [fall, Christmas 1987] sales and merchandise 629
sportswear. retail projections [1988]. major trends 1344
St. Gillian Group. ready-to-wear. expanding sales market, design philosophy, apparel lines, price points 2111
study evaluates womanliness of apparel 7016
suits [fall 1988]. manufacturer and retailer expectations, prominent trends 2946
summer sportswear. best sellers for various manufacturers. pants selling more than expected 2125
survey of major West Coast retailers, developments in knitwear 7028
swimwear line, Citrus, from Apparel Ventures. line products, price points, and company expectations 2947
swimwear. Raj Manufacturing's products facility equipment 7725
Trends Live show at Interstoff. fashion fabrics in apparel 2112
underwear, thermal or warm. styling from various manufacturers 2931
United States first quarter [1988] shipments. men's. women's. misses'. juniors' 8585
United States production statistics [1987] for selected apparel 4597
Units line. system of knit based on square shapes and related separates. product development and retail strategies 4602
Victor Costa's rise to hottest selling eveningwear and occasion resource projected [1988] sales, designs, prices 2113
women and bodywear, [fall 1988] retail sales and products 5430
women's panties. style, fabric preferences. buying habits 8636

APPAREL INDUSTRY (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL MANUFACTURING PLANTS, FASHION, KNITTING INDUSTRY, HOSIERY INDUSTRY, RETAILING, TEXTILE TRADE)

accessories, increased interest in private label. higher mark ups, weak dollar responsible 2981
American Apparel Manufacturers Association, new board members 7208
American Intimate Apparel [1988] expectations 1352

apparel, international textile care labeling symbols 3735
apparel, popularity. reactive dyeing becomes most popular process because of consumer demand for cotton 5269
AQ Industries. warp knitted fabrics, intimate apparel. fifty year retrospective 2601
Arthur Andersen and Company's Systems Integration Center. demonstrations in computer integrated manufacturing 4511
Asian exports. past, present, and future impact on the West 772
Australia. overseas sourcing reduced. increased demand on local mills 3870
Australian Standards Association. body dimensions. standardize sizing methods 3680
automation advances from Mahlo, Schlafhorst, Kannegiesser 7894
Bangladesh. [1987] production figures, [1988] expectations 8956
bar coding and electronic data interchange systems. standards. textile executives discuss advantages 3078
bar coding apparel, guidelines for Apparel Manufacturers Industry Show 5343
bar coding inventory system from Haggar 6233
bar coding pushed forward by Quick Response, vendor marking, inventory and production control 5356
bar coding technology and scanning for apparel industry. problems, advantages 2805
barcoding technology in textile rental industry 5423
Bobbin Show [1987]. advances to improve capacities of rapid supply 3681
Bobbin's annual survey of apparel industry software suppliers and directory 6171
Burlington's agreement to sell apparel fabrics portion of Blended Fabrics Division and Prints Division 2250
Buyer's Guide to manufacturers, suppliers, products, services 8975
buyers' guide to products and services [1988], by Apparel International 2806
Calvin Klein. fashion empire, design philosophy, collections 2817
Canada/United States free trade agreement. study on effect on Canadian productivity and employment 2341
Canadian apparel associations, listing 5338
Canadian apparel manufacturers and products' trade names. listing 5346
Canadian. suppliers to apparel industry, listing 5339
carcinogen warning labels in California fuels formaldehyde controversy 6234
care labeling, inaccurate labels force apparel industry to adhere to Federal Trade Commission regulations 7023
career wear for men and women. Initial Garment Manufacturing facilities 8631
Caronella Cloth from Carrington Apparel FAbrics, eighty percent polyester, twenty percent cotton 6739
cashmere costs raising prices, wholesale, by thirty to forty percent 4008
centralized apparel manufacture systems at [1986] Bobbin Show 5364
chemical exposure. Permissible Exposure Limit Project in United States 6335
Chetta B, dress house profile. ready-to-wear styles 2126
children's. effect of installation of bar code scanners at Kids 'R Us on industry 5426
China's apparel exports rise, reasons 7017
China's investment to upgrade apparel factories. China National Garment Industry Corporation and conglomerates. exports 1991
Chinese. six new policies being considered to improve the manufacturing and marketing of textiles and apparel 3154
CIM Linkage Council, voluntary standards. executives give views 5477
Clothing Economic Development Committee's guide for profitable planning in clothing industry 2802
Color Magic color changing process for apparel, Greater Texas Finishing 5247
costs. disadvantages of intense competition for labor in ready-to-wear 3683
cotton fabrics. growing market share, performance characteristics, processing 3224
cotton's market share, sales at retail 818
custom information systems installed by United States apparel manufacturers 2281
customer types identified by Management Horizons for apparel retailers 2984
cut and sew apparel industry. computer applications. electronic data interchange 3123
demand [1986] and beyond. population, shifts, economic trends 5563
designer. Armand Basi. spin-off of Lacoste development, design philosophy, lines, sales outlets, and volume 2886
developing countries threatened by high tech, automated industries of developed countries 6409
dollar, influence of drop on foreign textile trade. United States tax laws, foreign interest in retailing 2377
Dowling Textile's progressive personnel programs, advantages 3697
Du Pont supporting Dacron, nylon and Lycra expansion 6177
dyeing garments. domestic industry and retail ordering, influential factors 5251
ergonomics and employee productivity in apparel industry 5514
Ernst and Whinney survey of Quick Response implementation, benefits 7101
Europe, prices, decline of United States dollar. effect on men's wear. Italian, French manufacturers. market position 2099
European Community 2336
export prospects for domestic manufacturers 791
Fairchild's [1987] textile and apparel financial directory 1555
Far East/Southeast Asia sourcing, comparative analysis, advantages, problems 5571
fiber consumption up in United States, per capita [1987] figures 5601
Fourth Textile-Apparel Dialog forum for problems between textile and apparel industries 3986
Free Trade Agreement with Canada, what it means for United States textile businesses 7951
French apparel carriers and their trade 2803
German industry. production practices abroad. results 6346
Gitano's plans to enter men's sportswear category. program details and merchandise 2893
global and dispersion retailing practices. Benetton profile 2151
growth in the department store retailing industry after losses, specialty stores. strategies to regain customers 2987
Haggar Order Transmission system for inventory replenishment used for men's and women's divisions 5501
Henry I. Seigel Company profile to illustrate need for flexible manufacturing in rapidly changing apparel climate 3682
Hong Kong Polytechnic. clothing technology course activity and other programs available 6423
Hungarian. ten years of changes in export structure 7936
Hungary, new economic conservation methods, effects, structure 4697
Hungary. apparel sizing system developed 2012
Hungary. MTM method for calculation of production times and manufacturing costs 2273
illegal aliens report from General Accounting Office. apparel industry executives and employees respond 3896
imports, textile and apparel, up nearly eleven percent [October 1987]. reasons, industry reaction, government statements 1578
imports. of cotton shorts impaired by tight quotas 2097
India's apparel export industry remains competitive 8583
Indian. acrylic knit products 8937
industrial robots in German apparel industry 6970
industrial sewing thread manufacturers' high tech products. industry mergers, import problems, domestic market sales 3393
innerwear. Jockey International, profile of successful corporate expansion, markets, and products 7665
Ireland. optimistic outlook. future prospects for various industry sectors 7858
Italian textile industry. trends and growth 8934
Italian. poor attendance at Pitti Filati yarn fair reflects export crisis 1723

Italian. reaction to declining sales and Asian competition 8938
Item 807 trade. Special Regime, new textile agreement between United States and Mexico 5579
Jamaica. impact textile and apparel trade bill 1569
Jamaica. rapid growth of exports. problems with industry. lack of knowledgeable managers and technicians 4698
Japan. automated sewing system developed for small lot production 2013
Jonbil company profile. Long Haul jeans. marketing strategies 5404
knitwear. Italian manufacturers pessimistic expectation [1988]. weak dollar. Far East competition 2349
Krizia, market position in United States apparel retail market. company strategies. foreign licensing 1992
Kuris and Assyst. collaboration to improve products and equipment 8334
Kurt Salmon Associates [1988] profile of apparel industry. market, leading performers, critical issues 5340
labels, Point of Sale systems for use in apparel field. bar codes and optical character recognition price tags 2032
Lee Company profile. Lee Global image junior denim line, twenty-five million dollar advertisement campaign 7018
licensing agreement between Valentino and Warnaco for women's lingerie 2104
licensing support suppliers directory 5345
licensing. Amerex of California with Faberge to produce and market line of men, boys' outerwear with McGregor brand 1269
licensing. legal issues. protecting properties. conducting clearance searches, negotiating contract agreements 5344
management of human resources 3684
men's suits. tailored clothing. increased demand. fashion trends 3762
Mighty-Mac sportswear for men. return of company restructuring and new collection 2897
Odermark. company management and marketing strategies of West German tailored clothing and sportswear manufacturer 2814
Oxford research and development products suitable for small manufacturers. Quick Response 5414
Peabody House, Balmain's ready-to-wear expansion in the United States, honorary dinner for president of Oscar de la Renta Limited 501
People's Republic of China and Hong Kong. [1997] lease termination on garment industry 6230
performance of forty-six publicly owned retail companies. details, trends, mixed results 7027
Quality Assurance Process, apparel industry. benefits 5485
quality assurance throughout manufacturing process 7044
quality control based on shared information with textile manufacturer 6235
Quick Response as marketing tool for fashion industry, acceptance by apparel and textile industry 7669
Quick Response at Federation of Clothing Designers and Executives convention 6971
Quick Response combined with partnerships to produce competitive industries in textiles, apparel, and retail 698
Quick Response delayed by lack of participation at TALC Conference. retailers may force companies to step up implementation 5341
Quick Response survey of apparel industry, purpose to speed up implementation, highlights 6167
Quick Response, importance for manufacturers who want to reach retailers 502
Quick Response, status reviewed by Kurt Salmon Associates 1476
Quick Response. acceptance among French distributors and manufacturers 8756
Quick Response. challenge to management 3093
rayon acetate production threatened. polyester possible substitute 4051
rayon fibers from Avtex, high wet modulus 1649
ready-to-wear executives' forecasts [1987 and 1988]. short hemlines to help market 505
reorganization of CETIH, an information, research, and development center for the French industry 2808
report on world trade in textiles and apparel released by FFACT. United States and need for realistic policy 4775
retail sales slowdown not affecting fiber industry 4801
retail. Mervyn's department stores. product and merchandising focus. Quick Response 4708
SAFLINC passes EDI voluntary standard. more apparel industry participation needed 6407
savings from automation, fabric simulation software, improved sewability 8592
sewn products industry. prioritization for starting an integrated data processing system 6174
shirting makers and converters describe United States market [1988]. renewed interest in domestic production 1275
silk market outlook. increased prices, China and India exports, fashion trends 2430
Singapore garment manufacturing 2948
software. survey software companies in United Kingdom 4716
sourcing in the Caribbean. Item 807 program. important considerations 5563
sourcing in the Caribbean. new 807 arrangement and problems that can occur 5353
sourcing in the Far East, problems and advantages. domestic manufacturers describe market connections with Orient 3176
sourcing strategies [fall 1988] in Asia market. low volume buying trend, effect on mills and mill prices, knitwear prices 2129
sourcing. domestically, the Orient, and the Caribbean 2812
Spain, apparel exports. opportunities for Europe 6232
St. Gillian Group. ready-to-wear. expanding sales market, design philosophy, apparel lines, price points 2111
standards adopted by Textile Apparel Linkage Council. distribution and transportation, shipping label, packing guides 1591
standards from Textile/Apparel Linkage Council. industry participation 504
Steve Sakamoto and Market Research Active Sports. market analyses for men's beachwear, sportswear, and other West Coast fashions 2804
surfwear market, Action Sports Retailer trade show. industry positions and future expectations 2926
Swiss textile machinery associations post-ITMA meeting. machine, apparel industry impact of new circular knitting machines 7963
tailored clothing manufacturer Gruppo Finanziario Tessile. profile 3757
TAMMF conference, factory computer communications standards 5568
technology centers for industry opens in Raleigh funded by Textile/Clothing Technology Corporation 5354
technology centers of advanced apparel manufacturing open, sponsored by Defense Logistics Agency 6969
technology in garment manufacture versus quality of workmanship 2275
testing, textile. overview of its roles and importance 6345
Textile Clothing Technology Center (TC)2. research, education facility needs more support from apparel manufacturers 4507
textured yarns replacing spun yarns in technical fabrics, apparel markets 8222
Thailand. results of study on export trade 2127
trade restrictions for textiles and apparel, E. F. Hutton report. effect on specialty apparel industry 1581
trade, United States Department of Commerce report on domestic textile and apparel imports [1987]. details by country, category 2363
Tultex Corporation's manufacturing consolidation, three sewing plants to close and new one to open in Roanoke 3077
Twenty-first New Technology for the Apparel Industry exhibition in East Germany 3989
Uniform Code Council. Universal Product Codes 2844
United Kingdom. factors influencing competitiveness 6340
United Kingdom. future of industry 621
United State's Commerce Department's report [January 1988] textile and apparel imports 3162
United States apparel buyers' strategies [fall 1988] effect on mills

and prices. delay in placing Far East orders 1993
United States Commerce Department's [1988] industrial outlook for textile and apparel industries 2339
United States Department of Defense efforts to attract military apparel contractors. reasons behind new attitude, industry reaction 2809
United States factoring executives' expectations [1988]. effect of economy and import market 1994
United States first quarter [1988] shipments. men's. women's. misses'. juniors' 8585
United States forecasts [1988] in clothing consumption. effect of economy 5586
United States made apparel preferred in survey of United States adults 5590
United States made clothing preferred by American consumers, study shows 2950
United States manufacturers challenge Custom's interpretation of item 807 regulations 6414
United States manufacturers. duty-free concessions on domestic components of foreign products [section 807] 3166
United States retailers staying away from European fashion shows, reasons why, how retailers are dealing with high prices 2949
United States shirting makers and converters describe [1988] market 1275
United States textile and apparel imports from Communist countries. ITC study 3172
United States, new attitude for onshore production. contractors capitalize on proximity, flexibility, and marketing 5565
United States. denim and jeanswear industry. sales, production statistics, market changes, styles 2128
United States. fibers, textiles and apparel industry. history. changes. policy options 7859
United States. fiscal [1986] performance for fifty-seven public firms. strong recovery in the industry reported 1271
United States. manufacturers, contractors, retailers discuss possibilities for onshore sourcing 5585
United States. reducing lead times, making apparel manufacturers more competitive 8584
United States. survival depends on automation, quick response, robotics, and computers 5342
United States. three phased program to compete with imports and improve market share 5564
United States. transformation of industries, effects of policy decisions 7948
United States. [1987] outlook for soft goods and footwear. imports, expectations, consumption 1270
vendor and retail strategies include marketing as key component 7024
Victor Costa's rise to hottest selling eveningwear and occasion resource projected [1988] sales, designs, prices 2113
volume merchants, resources. cost of fashion. upgrading at Target, K Mart, Sears, J.C. Penney's 2983
Wall Street analysts predict sales and profit figures for leading apparel manufacturers 3769
Wall Street analysts' expectations for apparel manufacturers [1988]. [1987] figures for top fifteen manufacturers 1272
weather and shopping. study of interrelationship 5591
West Coast apparel manufacturing, executives from Esprit, V-8 Group, Shah Safari interviewed 5415
West German. analysis [1987]. poor performance due to imports 3976
women's intimate apparel manufacturers discuss their [1988] expectations 1352
work apparel and leisure apparel market. conceptions of the near future 3981
worker safety, United States Labor Department standards for chemicals in apparel industry 5551
workwear rental industry provides laundering service improved hygiene. Klopman International 8914
zippers from YKK (USA). company profile 695
Zoom Videos' low cost fashion videos for apparel companies 6963

APPAREL MANUFACTURE (SEE ALSO OTHER HEADINGS, SUCH AS CUTTING, EMPLOYEE TRAINING, FABRIC HANDLING EQUIPMENT, FASTENERS AND TRIMMINGS, FUSING, MOLDING, PACKAGING, PRESSING, SEAMING, SEAMS, SEWING, SEWING MACHINERY)

AAMA and University of Southwestern Louisiana open Apparel Computer Integrated manufacturing Center for research 6964
Act 1 dress manufacturing company. divisions, orientations, products 1273
adapting [1929] women's dress for contemporary use 5363
aftertreatment of jeans. use of air entangled thread to prevent seam breakage 1349
apparel and carpet fiber, polypropylene. care instructions, properties 7025
applications of computer aided manufacturing for small apparel companies 3696
architectural principles applied to design 4522
AutoCAD, software package for apparel manufacturers. university implementation 7673
automated process by Symagery. cloth to garment in less than sixty seconds 1279
Bacofa's unit production system for manufacturing jeans increases production. system operation 522
bar coding inventory system from Haggar 8233
bar coding system for apparel manufacture data processing 3910
Benetton's multimillion dollar warehouse. function and warehouse operations 3686
Benetton, manufacturing, promotion, distribution in Italian market and internationally, diversification and growth 1995
blind hemming machinery. 2800 H-3A from Union Special 8593
brassieres, sizes, documentation system for production to conform to standards 5362
BRITE project, CAD/CAM systems, communication and information, cutting, sewing, handling 2003
British Interlinings Manufacturers Association. Code of Practice 6976
British revamped patent regulations, effect on United States machinery makers 1530
Bromley Coats' expansion program. management, products, future plans 1996
Bullmer automatic cutting system for apparel industry 3717
buyers' guide to textile and apparel manufacturing machinery 6221
CAD integration in apparel manufacturing 7661
CAD/CAM developments in apparel manufacture 3907
CAD/CAM systems for apparel manufacture 5375
Canadian apparel manufacturers and products' trade names. listing 5346
Canadian Apparel Manufacturers, [1988] listing. product categories, locations included 5356
Canadian. suppliers to apparel industry, listing 5339
CB Sports. company profile 7662
cell production system at Alpargatas in Brazil, operation process 7675
centralized apparel manufacture systems at [1986] Bobbin Show 5364
chalk type and shapes that do not dry the skin, removed during steaming, and do not require sharpening 4523
Christy. English manufacturer of felt hats made from rabbit fur, profiled 2133
Clothing Technology Center to research technology for apparel and footwear manufacturing. joint project and programs 523
coats with raglan sleeves and accented shoulders, construction 3701
collars. design and sewing 1280
collars. sewing one piece collars which resemble two piece collars 1350
communications software by Apparel Computers System and Microdynamics 1504
computer aided design systems at [1987] Bobbin Show 721
computer aided manufacturing and design from Xetal Systems 3695
computer aided manufacturing and design in Hong Kong 7146

computer integrated manufacture for fashionably variable apparel production 2807
computer integrated manufacture, CIM Linkage Council (CIM/LINC) 4513
Computer Integrated Manufacturing analyzed. guidelines for buyers 2278
computer integrated manufacturing standards called for at Textile and Apparel Machinery Modernization Foundation 6358
computer integrated manufacturing, FIGARMA. problems with sequential sewing assembly 1506
computer program to control fabric use, norms 5372
computer programs for simulating production conditions and aid in problem solving 6352
computer systems for improved real time production control 8757
computerization of apparel functions. amounts and impact 2280
computerized designs converted to sewing patterns. image processing 1351
conveyors, analysis of systems available from United States sources 5521
correcting commercial patterns for women's pants to improve fit 5366
correcting women's pants to improve fit 5365
cost breakdowns for manufacturers. impact of program size on selling price 6168
costs estimation in complex manufacturing situations 6336
Creaset process for permanent pants creases 7674
crocheting hexagonal yoke sweaters 1023
cutting machinery. automatic affordability. benefits 4538
cutting systems improved by computer program to calculate fabric dimensions 4544
cutting. CAD/CAM system for most economical pattern cutting 7682
Cybrid System for pattern making. Lefort installation for shirt manufacture 3718
damage, solutions at SEAMS show by Sandoz Chemicals. softeners, lubricant 4553
data processing system. CIM applications in textile and apparel industries. conference highlights 6353
David Warren Enterprises, dress divisions. products, price points, [1988] expectations 1997
denim, wet finishing process. stonewashing, acid washing, overdyeing 1181
denim. Blue-J 1000 and 2000 to replace stones in producing stone and acid washed garments 2789
Dennison Cutting Room Optiplan. computer software, features 6183
designing apparel. computer systems at Levi Strauss and Esprit 2284
development of generic architecture and knowledge-based framework 8594
directory. machinery for drying garments 6956
distribution systems, warehouse, changes and ways to improve 503
dress pattern with bat wing sleeves 3703
dyeing services. New Zealand Auckland Dyeworks 2742
East German apparel manufacturing company and their integrated computer system 3693
East German computer program projects for optimizing patterning and material use in pattern cutting 3713
East German computer workstations for rationalizing apparel manufacture 3694
East German technical education in apparel technology 3995
Eton unit production system used at Courtaulds' wadded garment production plant 3723
fabric inspection necessary because of speed of examination by fabric manufacturers 2219
fabrics, functional characteristics studied to help develop automated fabric assemblies 2656
fabrics, polypropylene's popularity predicted to increase because of production advances 4867
fabrics. testing dimensional stability 7813
fabrics. wool/cotton blends. processing problems. dyehouse 4075
factory control systems. considerations and definition of computer terminology 2822
factory of the future. making-up, final control, finishing 7664
fall bookings for West Coast apparel manufacturers. reasons behind strong business activity 1274
Favrot. development of computer aided production system. problems 7147
fencing, protective garments. resistance to perforation 4609
fiber artist Adrienne Cruz uses tapestry technique to make garments 5041
finishing pleats 7559
five 600 series sewing machines from Union Special 4518
Flexible Manufacturing System for apparel manufacturers, Quick Response, lower inventories 6985
flexible manufacturing, way of coping with changes in retail and manufacturing environment 7676
French men's wear designers and companies profiled 2091
garment and flatgoods automatic folder from Automated Textile Systems 6978
garment assembly machine manufacturers at [1987] ITMA 2309
garment dyeing overview 8507
garment dyeing procedures. patterns, trim, sewing, dyeing 6863
garment dyeing woven cotton sportswear. splatter dyeing 1196
garment dyeing, buyer's guide [1987-1988] to machinery 1221
garment dyeing, cost justification 1194
garment dyeing, improving preparation techniques 1195
garment dyeing. methods, difference, manufacturing garment dyed apparel 6122
garment dyeing 7608
garment handling system Vari-Flow overhead rail system. flexibility, unique features 4547
garment piece block construction. designing at the graphics display board 1505
Georges Marciano to open Misfits. company products, and plans 1998
Georges Marciano's new company Misfits. collection and price points 2932
Gerber AM-5 CAD system for planning advance time in women's apparel manufacture 4519
Gerber Garment Technology's improved product line. new attachments, more efficient electronic controls 4536
Gerber spreaders, cutters, unit production equipment, CAD systems 2835
girl's morning coat. cutting pattern and dimensions 7672
Gitano's plans to enter men's sportswear category. program details and merchandise 2893
gloves, leather. handmade 7677
Grilon yarns from EMS-Grilon. heat degradable yarns used for fusible bonding and melt adhesive purposes 4979
Group GFT. use of fashion designers in market oriented management strategy 1477
Gruppo GMT apparel manufacture and Gerber CAD/CAM systems 6977
hand-finishing techniques to recreate Renaissance costumes 7687
handknit raglan sweaters 2595
handknit sweaters for women whose bust exceeds forty inches 5055
hems. hand and machine worked 2823
high technology and competition with low wage countries. United States successes 5350
Hoerauf Maschinenfabrik apparel wrapping and packing systems 3925
Hollings College. clothing design and technology 6974
Hungarian progress in computer aided apparel manufacture 8586
Hungarian standards. comparison to ISO and Comecon 7979
IBM's Application System/400 for apparel manufacturers, retailers. models, software, extravaganza introduction 7140
IMB [1988] in Cologne. machinery, computer aided design 8630
IMB. Rockwell-Rimoldi, Pfaff-Pegasus sewing machines for underwear 6991
importing practices. AAMA chairman blasts domestic textile industry for shortages in cotton yarn and yarn dyed fabrics 4776

INA Systems Suspension/Bundle Online Real Time Production Management System in Swiss garment plant 3714
India. apparel made from textured polyester and nylon yarn 5804
industrial robots in German apparel industry 6970
industrial sewing thread manufacturers' high tech products. industry mergers, import problems, domestic market sales 3393
innerwear. Jockey International, profile of successful corporate expansion, markets, and products 7665
instrument mapped pattern drafting system for garment cutting 2832
interlinings, interfacings, linings. suppliers and products at Bobbin Show [1987] 524
interlinings. friction spinning of DREF 3 yarns of goat hair, horsehair 4939
International Clothing Machine Fair IMB [1988]. American exhibitors at fair 6368
International Clothing Machine Fair [1988], CIM prominent 6165
International Clothing Machine Fair, IMB [1988]. focus on computer integrated manufacturing 6966
Invesmove flexible production system for apparel manufacturing 4516
ITMA [1987]. cutting, sewing, linking, boarding machinery 8613
ITMA [1987]. preview. technical information 7898
jacquard design system for neckwear, color tone analyzer from various Japanese companies 5507
jacquard raschel machine RJSG 4 F-NE from Mayer with electromagnetic yarn control. apparel, underwear applications 1002
Jacques Vert profile. computer lay planning, CAD systems 3687
Jamaica, efforts to become top Item 807 performer, programs with United States 5574
Janine Gallimard. classical milliner specializing in bridal millinery 4520
Jantzen's Quick Response program and future plans 7663
Japan, automated sewing system, research and development project review 2013
jersey. applications, solutions 5909
JIAM [1987]. apparel manufacturing machines and accessories 3704
jogging suit pattern. instructions and size tables 3700
Joseph and Feiss and success with modular cutting 5370
Juki ADU-332 sewing unit. pleats 3726
Jumberca's Models DWN-3E and TLJ-5E. knit apparel 5070
Just-In-Time applied to sewing line 3879
Kannegiesser Formstar for ironing just-assembled garments 6987
Kleber Model 2000 and 64 pleating machines and DS Model Bello steam chamber (Trade Lit.) 8576
knit design with cable stitches 7434
knit fabric joining. Kettma's four linking machine models 7688
knit fabrics sewn on zigzag machines 7689
knitting instructions for seamless neck-down sweater design 4228
knitting machine, flat. electronic Electra Baby for notions 5078
knitwear industry CAD systems applications. MicroDesign system 1022
knitwear. Vivian Chan Shaw, Australian company. profile 5422
KSL (S. M. Kirov Institute) device for fiber orientation, straightening tests 4087
labeling practices in the United Kingdom. need for international standards 2033
labeling, computer design systems, online with manufacturers, retailers for Quick Response 2972
latchtacking machinery. 2800 LTA series from Union Special 8595
laying out and cutting outerwear fabrics. reduced waste 516
leasing manufacturing equipment, advantages 7666
Lectra Systems computerized digitization and grading systems 3705
Lectra Systems' machinery at New York Hilton show. electronic pattern scanner, Rockwell-Rimoldi machines 6166
Leslie Fay's Sanford Mazer, vice president of manufacturing, profiled 1487
Levi Strauss in-house research and development efforts. goals, strategies 5416
Levi Strauss's move to a four day work week. industry reaction and company reasons for cutback 3067
linen jacket and interlining. improving dimensional stability during laundering 4524
linings. classification, specifications, and construction 8596
linings. developing patterns for jacket linings. adhesive linings 517
Liz Claiborne. annual report. sportswear leading sales. accessories, bridge, fragrance, men's wear divisions 4508
loungewear, men's. cooperation with retailers 2913
machinery, make-up. JIAM [1987] exhibition 525
Malina Gerber, children's wear manufacturer, designer, and retailer 2882
management and technology, strategies for marketing seasonal lines 1496
management of technology and innovation for long term planning 7127
management practices in apparel manufacturing 2824
management strategy 6973
management, balance of quality, productivity, cost, and delivery. quality control 6967
market trends [1987, 1988]. statistics on hosiery/legwear industry at manufacturer and retailer levels 6035
Marv Holland Industries. Canadian uniform manufacturer. large inventory and self-contained work stations 2131
materials handling costs, computer model for effective strategies 6972
materials handling systems for the Australian apparel manufacturer 3698
Mebana's computer aided design system for apparel production, software 530
Megstar Le Tigre apparel for young men and boys. reactive dyes for color brightness 3706
men's knit sports shirts 2951
men's suits. changing pattern dimensions to fit apparel sizes 518
men's tailored clothing manufacturers conform spring modeling and fabrics plans at NAMSB 2927
men's wool suit production, conversion processes, special production problems 519
Meritina invests in Kuris Pioneer Super II spreading machines and cutting tables 5377
Mexico and United States cooperative production efforts. Maquila program 5576
Mode-Woche Muenchen, Fashion Week Munich. apparel show's success analyzed 2132
modernizing the sewing room, automation, retrofitting 709
modification of CAD generated garment forms 6180
modular manufacturing of J & F executives describe program at Clothing Manufacturers of America seminar 5352
modular manufacturing, Japanese production process. implementation by major United States companies, results 5351
modular manufacturing, paper by Mike Brent given to American Apparel Manufacturers Association summarized 3895
modular production units in apparel manufacturing plants, problems 3685
mohair and wool worsted suiting fabrics. performance during making-up 7678
multifunction line from A. N. Kosygin Moscow Textile Institute for young adults 5337
MWG Apparel. Canadian shirt manufacture. highly automated production system using Gerber and Eton machinery 2130
Odermark. company management and marketing strategies of West German tailored clothing and sportswear manufacturer 2814
origin of clothing 2878
OSHA's new formaldehyde standard, apparel manufacturing executives attend workshop about new standards and regulations 4757
overedge, cover, and safety stitch machines. Class 500 and 600 stitch types 2044
Oxford research and development products suitable for small manufacturers. Quick Response 5414
oxidation of pins 3708

pants size standards 5361
patch pockets 5386
pattern pieces with computer design system for size calculation 3729
PC-based fashion systems in apparel industry. hardware and software from various companies 4512
plaid fabrics, buying and preparing, selection 4525
plaid fabrics, design. cutting on the straight grain 4527
plaid fabrics. method for matching without pinning or basting 4526
planning and scheduling board for apparel manufacturers 3905
planning techniques. classification of fabric construction by end use 8597
PMTS motion/time systems for sewing industry. Peter Evans' CME 5385
Poland. analysis of apparel work stations. MTM method 8590
polypropylene in functional clothing due to ability to wick moisture away from skin 4620
pressing and finishing operations outlined 3709
pressing, fusing, finishing, and industrial laundry products at Bobbin Show [1987] 526
preticketing, by vendor, in apparel industry. advantages for apparel manufacturers and options in systems 714
pricing and costing process. making sure of gross profits 7679
private label programs expand due to trends in men's wear industry 6169
private label, importance in women's ready-to-wear retailers and manufacturers describe market position 2811
product development and costs. computers versus handwork skills 3916
production costs for woolen garment manufacture by rural Indians in Bharmaur 5496
production documentation system to improve communication between design area and production area 5368
production planning, organization model takes recent economic changes into account 701
productivity. 80/20 rule and its effect on unit production, reduced inventory 6968
Profeel manufactures Zippy assembly guide 3727
program based on economic model of material consumption in apparel plant 6356
programmable applications system for apparel industry robots 7870
pumice stones for stonewash and acid wash finishes 1263
quality control, costs 3898
quality control, role of the textile worker 715
Quick Response for apparel manufacturers, problems with program 3688
Quick Response in garment dyeing. future prospects and cost savings 6864
Quick Response programs in apparel manufacturing. industry executives at conference on New Technologies 2810
Quick Response strategy analyzed 1990
Quick Response survey of apparel industry, purpose to speed up implementation, highlights 6167
Quick Response system used by Haggar 6231
Quick Response, apparel manufacturers' implementation. industry reaction 5347
Quick Response, electronic data information systems, and bar coding programs in retail and vendor communities. review 4517
Quick Response. symposium summaries 1512
raincoats, waterproofing without coating 7680
rapid development of new technology. IMB and Bobbin Show exhibitions 8598
reactive. Ciba-Geigy. dyes and systems for garment dyeing 7607
Readywear buyer's guide, international manufacturers 2386
robotics in apparel plants, ShBM-150 device for fabric roll transport 4531
rollpadded lapel and its re-emergence as quality symbol. KA roll padding machine 3710
rollpadded lapels. rollpadding automat KA, features and jacket construction 6181
Rosso manufactures Rototurn. automatic sock turning device 4226
sashiko. traditional decoration and reinforcement for Japanese work clothes 5379
savings from automation, fabric simulation software, improved sewability 8592
Scheller full-fashioned knitting machines. Models NCI and BCI/BCF 6712
seam slippage in woolen fabrics 3711
sewing machine needles and heat build-up. relation to speed, material thickness and surface density 8645
sewing machinery and equipment. programmable. electronic control 6198
sewing materials, Eastern European production and usage levels 555
sewing mills. mechanized storage and transportation system, reduced labor consumption 529
sewing production lines, transportation and storage equipment, speeding knitted apparel production 527
sewing. Shenkar system, robotic sewing system for apparel production 7681
shirt patterns 2014
short rows and wrapping in knitting 4241
Singapore, profile 2948
sleeve hemming machinery. 2800 SBH-1A automatic from Union Special 8599
slopers. customizing commercial fitting patterns 2825
Slumbertogs' computer aided design system 3689
smocking contemporary apparel 7692
Softouch Company, activewear source, management, products, fabrics, sales, future 7019
software by CIM Textil Computer at Verse-Blusen apparel firm 6979
Softwear Swimwear Incorporated's custom design swimwear with the aid of computer design. products, styles, fabrics 3690
Solis manufactures automated machines to manufacture and handle pantyhose 4227
solutions for cutting and matching plaid, striped, checked fabrics. Investronica Matching System, Brisay plaid matching machine 1281
Spandex swimming apparel, production analysis 703
Spossa Bella. custom bridal gowns 4521
state-of-the-art pressing and finishing equipment from Veit. automation 3721
steam tunnels 1301
Step-Back Trimming Device from AMF Clarbro for production of sewn sub-assemblies 4555
strip cutter from Dado, Rollmaster. beltings, laces, zipper tapes 5378
sulfur dyes in garment dyeing 7621
suspended garment production systems analyzed with respect to Quick Response 2011
sweaters. custom fit handknit, instructions 4230
sweaters. measurement guidelines for handknit sweaters based on conventional sizing 4229
Sympatex from Enka. polyester membrane for outerwear, hats, footwear 2694
systemization of sewing techniques 8612
tailored clothing industry benefits from innovations in fusing and pressing. review of developments 1287
Technical Development of Preparation for Automated Clothing Process, project. cloth stabilization, cutting techniques 6179
technology centers for industry opens in Raleigh funded by Textile/Clothing Technology Corporation 5354
technology centers of advanced apparel manufacturing open, sponsored by Defense Logistics Agency 6969
technology demonstration centers at FIT, Clemson, Georgia Tech 8600
technology, Du Pont executive urges AAMA members to invest. other executives echo opinion 4509
technology. Advanced Apparel Manufacturing Technology Demonstration Project. university centers, project goals, products 7667
testing procedures in cost effective apparel assembly 3829

Textile Clothing Technology Center (TC)2. research, education facility needs more support from apparel manufacturers 4507
Textile/Clothing Technology Corporation's Apparel Technology Center. advanced apparel technology 5349
Textile/Clothing Technology Corporation's technology center for apparel manufacturers 3691
theatre costumes, design, manufacture, maintenance 1282
thread measurement system for sewing stations from Vertex Engineering 7696
Touche Ross/Bobbin survey of software for apparel managers 6173
Toyota Sewn System used at Top Print AB uniform manufacturer 1513
transfer printing sportswear. thermo-printing plant Blacky Mode-Design. Swiss 1954
TRASS developments. automatic fabric inspection, permanent fabric stabilization, pattern cutting, automatic cutting 5348
TRASS sewing systems developments [since 1983] reviewed 3707
Twenty-first New Technology for the Apparel Industry exhibition in East Germany 3989
Union Special sewing machines for denim, knitwear, pants and gloves 2847
unit production system, installation, cost advantages. rules for smooth operation 2826
unit production systems displayed at Bobbin Show [1987] from Eton, Gerber, Durkopp, INA, and Investronica 528
unit production systems from Eton Systems. in place example. 2002 MDF system advantages 4548
United States apparel producers, successful exports into foreign market, entry, methods 5580
United States Customs' regulations for Mexican apparel manufacture, industry reacts negatively due to low profit margin 6415
United States. reducing lead times, making apparel manufacturers more competitive 8584
VEB Kombinat Trikotagen's improved contour, overlock and double chain sewing stations for lingerie and fine knits 3725
vibrotransporters for apparel components, tests for proper air pressure levels 4733
Viscosuisse knit polyester fabrics for functional sportswear and travel apparel 5417
Vivrelle. polyoxyamide fiber developed by Snia and American Sun for apparel 8094
waistbands. fitting and construction 1283
washer-extractors from Cherry Tree for stonewashing 1986
weatherproof activewear. Zefsport nylon fabric reinforced with Gore-Tex laminate 2648
women's raglan sleeve jacket. pattern refinements for larger sizes 4528
wool garments, finishing technique 6846
workwear fabric engineering, developments 5116
yarn. air jet texturing increasingly popular in apparel yarn market 3385

APPAREL MANUFACTURING PLANTS (SEE ALSO OTHER HEADINGS, SUCH AS KNITTING AND HOSIERY MILLS, TEXTILE MILLS)

Act 1 dress manufacturing company. divisions, orientations, products 1273
Ariela Puerto Rican facility. S.E.S.'s Better Earning Sewing System (BESS), and other plant equipment 506
Bayard plant in Strasbourg, France. the Bodycut system for made-to-measure suits 2827
Bee Line Products of Dublin. solution of problems created by volume manufacturing 2813
Cal Sport, manufacturing facility, equipment 507
Charm Corporation's Eton and Gerber production systems 508
CNCV plant in La-Roche-sur-Yon. use of Brother BAS 600 for pockets 6988
computer systems for improved real time production control 8757
Dolphin Trimming, Inc. company profile. reasons for success. machines in operation 6189
education system to promote waste reduction for apparel plants 5595
Freeman, H., and Son, facilities and equipment 509
Garan's EDI program for customer service, intercompany linkage 6172
garment transport conveyor at Belgian textile plant yields more sanitary products 8845
General Sewing Data system adapted to produce work tickets at Stephens Brothers 4529
Gerber S93 cutting system at Fermark bra manufacturing company. system features and advantages 535
GM-100 Gerbermover and Ipec's fashion transport system installed at Depict 3692
Gruppo GFT. massive expansion. production of short runs of top quality goods 4530
Henry I. Seigel Company profile to illustrate need for flexible manufacturing in rapidly changing apparel climate 3682
Initial Garment Manuacturing facilities. career wear for men and women 8631
Iva Manufacturing profile. investments, long term ROI strategy 5355
Kellwood Company's Altus plant uses Union Special sewing machinery, plant operations 5367
Klopman International modernizes workwear operations in Italy 1187
Levi Strauss and Company's plant equipment 510
Levi's computer production tracking system 7867
Little Laura of California, divisions, operating facilities, plant equipment 511
Mustang, West Germany's leading jeans manufacturer. profile 6182
Odermark. company management and marketing strategies of West German tailored clothing and sportswear manufacturer 2814
Raj Manufacturing, women's swimwear manufacturer. products, facility, equipment 7725
Richards Sportswear, computer integration and improved efficiency in production 7726
Russell Corporation, apparel manufacturing facilities, modernizing program, plant equipment 512
salary increases for sewing mill personnel, effects on costs and production 704
Sanyo Sewing America, facility, company operations, equipment, garment production 513
Sarig Fashions Knitting Mill produces sweater blanks, profiled 1479
Satellite Plus for real time production control at Lebanon Apparel 5516
Schiesser. logistics of mill organization and production 700
sewing mills. mechanized storage and transportation system, reduced labor consumption 529
Stedman Corporation, maker of sportswear and underwear. Union Special automated equipment 5387
Stetson sale to Resistol approved. specifics of the sale 1488
Switchtrack Rail System installed by C & B Trimming. unit production system, company history 4561
Tultex Corporation [1987] annual report 1999
Tultex Corporation's manufacturing consolidation, three sewing plants to close and new one to open in Roanoke 3077
Tultex opens new plant in Virginia to consolidate facilities 2260
Warren Featherbone Company, history, recent purchases of equipment and information systems 514

APPLICATORS (SEE ALSO OTHER HEADINGS, SUCH AS COATING)

Actipore modified acrylic fibers. controlled application of chemicals 8011
applicator. Kuesters Flexnip 3613
DeVilbiss contactless spray applicators for high loft nonwovens 3677
dye liquor applicator for printed carpet tiles, from Fleissner 3648
foam application units. dynamic flow phenomena 7576
Industrial Precision Ltd.'s Swet Rod applicator for warp beam lubrication 3410
ITMA [1987]. highlights. dyeing and dispensing systems 3659

ultrasonic spray nozzles by Sono-Tek 3926
Webcoter spray coating system for moving webs. Sono-Tek 1980

ARACHNE TECHNOLOGY, SEE STITCH BONDED FABRICS.

ARAMID FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS HIGH MODULUS FIBERS, MANMADE HIGH TEMPERATURE FIBERS)
aluminum laminate panels reinforced with aramid. residual strength 1142
Apyeil from Unitika. high performance flame and heat resistant fiber 2449
aramid reinforcement of polymer compositions. new plasticizer experiments 1682
aromatic polyamide-imide. high modulus fibers and films 5711
composite systems. improved microcrack resistance 4312
composite with J-1 polymer matrix reinforced with Kevlar. crystallization and processing behavior 8730
cutting. methods for aramid materials 2839
diffuse reflectance Fourier transform infrared spectroscopy used to detect water bonded to Kevlar 49 fibers 7298
discontinuous fiber reinforced thermoplastic composites 4318
dispute between Du Pont and AKZO over patents settled with cross-licensure agreement 7954
Du Pont and Akzo patent disputes over Kevlar (TM) and Twaron aramid fibers 4777
Du Pont and Toray build joint Kevlar manufacturing plant. markets and aramid fiber applications 6495
Du Pont and Toray Industries building Kevlar plant in Japan. size, cost, production capacities 6493
Du Pont Avimid N polyimide chopped fiber molding compound. high performance parts 4304
Du Pont Kevlar HT and HM. properties and applications 5641
Du Pont research. market-driven and discovery-driven methods 3199
Du Pont's Kevlar HT and HM fibers to be produced in color 3249
Du Pont's Kevlar plant in Maydown, Ireland 5648
Du Pont-Toray to build Kevlar manufacturing plant in Japan 6494
exotic fibers in the industrial fabrics industry, aramids, ceramics, modacrylic, and others. applications 5664
extrusion of nematic liquid crystalline fiber. highly oriented fiber without drawing 6510
fire resistant cargo liners for commercial aircraft. FAA regulations 4347
fire resistant Kevlar composite interior panels for commercial aircraft 4322
flame retardant applications 762
Fortafil aramid fabrics from TBA Industrial Products. fabric properties, application 1820
heat resistant material for fireproof clothing, aramid fiber composition 6031
high modulus aramid copolymers. ultrasonic and crystallite moduli as function of temperature 2457
high performance polymer matrix composites. deterioration in aerospace environments 7500
infrared photoacoustic technique for orientation of Kevlar 49 fibers 7798
interface problem between aramid fibers and matrix resin in fiber reinforced plastics 6496
Kermel fire resistant fibers. Rhone-Poulenc 2450
Kermel from Rhone-Poulenc. synthesis and properties 4832
Kermel, from Rhone-Poulenc. use in nonwovens 1657
Kermel. manufactured by Rhone-Poulenc for nonwovens and protective clothing applications 867
Kevlar 149 investigated for elastic modulus of crystalline regions 8019
Kevlar 49, surface hydrolysis with sodium hydroxide 6140
Kevlar 49/epoxy beams and rings. bending behavior 1141
Kevlar 49/epoxy laminates. bending response of beams and rings 8358
Kevlar aramid reinforcement in Pirelli racing and commercial tires 3250
Kevlar HX from Du Pont. second generation fiber for use in composites 8018
Kevlar pulp for thixotropy and mechanical reinforcement in sealants, adhesives, and coatings 3509
Kevlar. deterioration under stress from nitrous oxides 8020
Kevlar/epoxy composites. compressive response 6298
law suit between Du Pont and Akzo over aramid fiber patent settled. details remain undisclosed 5649
Lenzing P84 flame resistant polyimide fiber, similar properties as polyaramids 3251
Mayer's ZM(Z)G warping system for high tenacity yarns 989
meta-type aramids. heat and flame resistance and applications 6497
MTC aramid from Mitsui Toatsu Chemical. low cost, heat resistant 868
N-H groups. determination of accessibility in Kevlar 49 fibers 7297
Nomex T-463 meta-aramid from Du Pont, for high density, light weight felts 869
nonwovens applications. growth outside military and aerospace markets 4282
nuclear magnetic resonance. aramid-containing nylon 6 polymers 4034
oxygen atom interaction with materials. materials exposed to low Earth orbit space environment 7359
para-aramid fibers used to replace asbestos in reinforcing composites 8022
parachutes. use of Kevlar and nylon materials. guidelines 7533
polyamides, structural and mechanical properties 6544
polyetherimide, aramid fiber reinforced. experimental nose wheel door design 687
PRD-149 high modulus Kevlar fiber from Du Pont 3252
preliminary release of report on high performance fibers, anticipated domestic demand and fiber pricing [by 1992] 3277
printing 4894
properties, developments, preparation methods reviewed 5651
reinforcing thermoplastic elastomers with aramid fibers 7479
short aramid fiber reinforced thermoplastic composites. improved wear resistance 2643
spunlaced aramids from Du Pont 1888
strength degradation of Kevlar 49 due to stress and nitrogen oxides 4650
surface of Kevlar fibers modified by methylation reaction to improve adhesion to polymethyl methacrylate 8130
Teijinconex. Technora. new FR Teijinconex flame retardant fibers 8021
totally encapsulating chemical protective suits. test protocol for measuring dynamic integrity 7739
two step braided composite system 4343

ARNEL IS AN ACETATE FIBER.

ARTS AND ARCHEOLOGY
African-American quilts. improvisation based on tradition 8673
African-American quilts 7691
algorithmically generated patterns for knit fabrics 8279
alkaline deacidifying agents. effects on historic and naturally aged cellulosic textiles 7932
Anglo-Saxon costume, fifth and sixth centuries 1304
archaeological tools and analysis of ancient textiles 3807
Barbara Jedermann's tapestries of groups of people and painterly methods of weaving 3782
batik flower motifs. Ellen Goldman's influenced by Willy Fleur's paintings and Raden Suwondo Sudewo's batik 4778
batik impressionism of Joachim Blank. influenced by the Far East. silk 4629
batik on cotton from Irmgard Feld. realistic nature depictions 4630
Berlin wool work of the nineteenth century, technique described 2021
Bindungen exhibition of Rheinland German textile artists 3783
broderie perse used in quilts based on Oriental rugs 4550
California Fibers artists' group from San Diego. works and concepts 3784

chemical colorants in cochineals used to analyze ancient textiles 1231
contemporary German, Finnish handicraft art in exhibition 4631
couching for textile conservation 2852
Deborah Kruger, installation artist, and her work titled Tribe of Dina 8651
decorative fabrics, documentary prints for popularity due to historical restoration, antique and reproduction furniture 3022
Deidre Scherer. fiber artist who specializes in representational collages 2995
Deidre Scherer. fiber artist who works with fabric applique to create portraits of elderly subjects 8652
deteriorated silks evaluated with scanning electron microscopy and energy dispersive X-ray spectrometry and dye analysis 7283
Detlef Lehmann's restoration work with old fabrics 2851
directory for equipment and supply companies for fiber artists 1588
Dorothy Caldwell, textile artist, explores the rituals of myth and magic 1393
Douglas Johnson. fiber artist specializing in embroidery of still lifes and medieval motifs 2022
dyed silk fibers on wool. Maria Multhauf's landscapes 4628
embroidered vestments from late Medieval Germany exhibited in Hannover. wool or linen fabrics and pearls 4610
embroidery school, Japanese, Kurenai Kai 4540
Ewa Kuryluk. paints faces and bodies on fabric with felt pen and acrylic 8653
Faeroe Islands. traditional knitting techniques 2600
feather motifs in handmade quilts 2846
fiber artist Judith Larzelere adapts Seminole strip piecing technique 5382
Fifth German Biennial Exhibition of Textile Art, Krefeld. major exhibitions 4787
galabiyehs (tunics) excavated from Egyptian sites dating from medieval Islamic period 1380
German Textile Art Group. [1988] exhibition. textiles to suggest sculptural forms 4626
hand-finishing techniques to recreate Renaissance costumes 7687
Herforder Teppichfabrik's tufted carpet design competition and results 3785
Hiberno-Norse headcoverings, tenth and eleventh century 1303
historic and prehistoric textiles studied with vibrational microspectroscopy 7795
Hmong textile art called pa ndhav, which translates as flower cloth 4532
Holger Stracken and his revival of Blaudruck hand-printing style 3577
Hubbell Trading Post. miniature paintings of Navajo rug designs 2996
Indian chintz and velvet textiles from seventeenth and eighteenth centuries 1394
Jane Lackey, textile artist and painter, three-dimensional wall pieces using primal images 1395
Janet Malotky produces woven images based on international symbols 8654
Jewish prayer shawls woven by women at synagogue in Pennsylvania 8649
JoAnn Giordano, silk screen artist, uses images and colors reminiscent of those of Tibetan tankas and prayer rugs 1396
Karen Doty. fiber artist specializing in embroidered portraits 2024
Kasuri prints in Frankfurt. Japanese style Ikat weaving 3786
Keiko Yamaguchi, fiber artist, life and work 1397
knitted-lace edgings 5048
lace, review of historic pieces from the Hertha Koenig collection 4646
lacis embroidery, techniques 1286
Lynn Johnson. textile designer specializing in home furnishings 3015
Madeleine Colaco. Brazilian fiber artist specializing in embroidered tapestries 2997
Mamluk carpet, study of dyes and mordants used in Cairene workshops 5260
Margarete Pfaff's architectural and abstract landscape weavings 4627
marionette museum in Luebeck, West Germany. Burmese puppet drama program 3790
medieval man's costume excavated and conserved in Sweden 1308
metal wrapped yarns studied from eight museum textile samples, electron microscopy and energy dispersive x-ray spectrometry 4978
Middle Eastern fabrics at Cologne exhibition 3787
Missy Stevens, fiber artist, specializes in weaving cotton corduroy 1398
Museum of Vintage Fashion in San Francisco 2965
museum, Rheinish Industrial in former cotton spinning mill. showing [1837] industrial plant and life of workers 4779
Nasca sprang tassels, principles involved in manufacture 1399
Navajo rugs. material sources 1400
Navajo rugs 1011
needlepoint at English Textile Artists exhibition, Stuttgart 4632
Ora Humberd's collection of lace 7690
Pamela Matiosian, textile artist using mixed media 1401
Parylene-C polymer evaluated as coating for fragile, degraded silk 7281
patchwork mosaics designed from batik fabric pieces 3791
Philip and Hope Holtzman collaborate on woven figures with carved wooden masks 8655
pile rug weaving. origins in Middle East and Scandinavia 1406
portraits of Victoria Weill in needlepoint 8656
prehistoric and historic textiles. integration of results of a number of analyses. Etowah example 7955
purple dyes from M trunculus shellfish. dyeing controversy 1235
Quaker Tapestry celebrates history of Quakers. a group effort of Quakers around the world 4541
quilt designs, computer aided, for images of pop idols by fiber artist Marcia Ente 8674
quilts based on Oriental rug format and structure 4551
quilts, African-American. strip or improvisational, traditional and contemporary 4549
Rautenstrauch tapestry collection in Trier 3788
religious rituals and the symbolic significance of textiles 1407
resist dyers of contemporary and traditional apparel and textiles. Shigeki and Shihoko Fukumoto 1402
Royal Purple, reconstruction of ancient dye preparation process 5263
sashiko. traditional decoration and reinforcement for Japanese work clothes 5379
Schiaparelli. women's fashion designer. history and designs 2968
Shaker rag rugs 5024
shawls brought from Kashmir to Europe [1700-1870] displayed at de Young museum in San Francisco 2944
silk weaving, fourteenth and fifteenth centuries. London 1009
Silke. fiber sculptures from Argentina 3789
sixth century Coptic tapestry representing scenes from Nile River and allegorical figure 1408
skin, hair, silk discoveries lead to data on animal breed types used for manufacture of parchment and textiles 7956
Soshun Biko. early nineteenth century treatise documenting hand held loop manipulation braiding techniques 1403
tapa. production and significance in Tongan society 1409
tapestries computer-aided, by Olivier Masson and Bernard Aujogue. Pointcarre CAD system. optical illusion or moire patterns 4635
tapestries of Elene Gamache 8657
tapestries, Anneke Hoeppener's wool gobelin 4634
tapestries, gobelin. Marlies Fraling's space suggesting landscapes 4637
tapestries. ten year retrospective of Annie Woywod's students. Museum Schools Rheydt 4636
tapestry weaving by Egyptian children 7407
tapestry. revival of Byelorussian gobelin tapestry. new techniques and themes 4633
textile conservation. needlework 7697
textile painting, history. fabric deterioration, protection of pictorial

layers 5188
textile restoration, preliminary examination, conservation treatments 5105
textile skills in creating marionettes and their costumes 3770
theatre costumes, design, manufacture, maintenance 1282
Thirteenth Biennial Tapestry Exhibition, Lausanne. prominent theme, artists, cotton popular 4790
ultraviolet stabilizers to reduce fading and degradation in museum textiles 5202
University of Bielefeld quilting art exhibition. twenty-six West German artists 3982
Voodoo banners used in ritual, designed by Haitian Voodoo priests 1404
weaving, narrow band Dreieichenhain historical presentation covering Europe and Africa. Eugenia narrow loom 4177
weaving. Bolivian folk. Aymara and Quechua motifs on wool. patterning in warp rather than weft 4638
weaving. journeyman and master candidate projects. weaving program students at Gottlieb-Daimler School, West Germany 4639
weaving. triaxial technique by fiber artist David Mooney 8326 8327
Western Anatolia [1750-1914]. overview of carpet makers 1414
winners of German Bobbin Association competition for bobbin lace works 3719
Woody Logsdon, fiber artist, specializes in photoweaving 1405
wool morphology evolution in Merino sheep 834
woven fabric patterns based on complementary angles 3525

ASBESTOS
alternatives. risk potential of synthetic fibers 11
aluminum silicate fibers and substitution for asbestos 5677
asbestos substitutes. formulae for approximating linear density of equivalent yarns 2489
Atlan acrylic fiber asbestos substitute from Toray 8012
ceramic fiber yarn and webbing, asbestos substitutes for high temperature applications 870
ceramic fibers as asbestos substitute. production and applications 5637
exposure among insulation workers. occurrence of benign pleural effusions 7917
finishing with polymeric dispersions to reduce release of toxic dust 1968
Kevlar pulp for thixotropy and mechanical reinforcement in sealants, adhesives, and coatings 3509
Kuraray and Unitaka commercializing vinylon fiber as a possible asbestos and tire cord substitute 5719
localized electrostatic precipitation versus exhaust ventilation for controlling dust in asbestos mill 8907
Mitsubishi Rayon acrylic fiber with very high strength for use as asbestos substitute 6490
pan-acrylic fiber asbestos replacement. Atlan from Toray 8014
para-aramid fibers used to replace asbestos in reinforcing composites 8022
removal as health hazard. building owners affected by EPA emergency act 4804
substitutes. glass, ceramic, aramid, and carbon fibers 762
substitutes. product determinations 5964
testing, asbestos in ambient air determined by microscopy methods 3066
thermal characteristics of asbestos-nylon-epoxy composites. effect of fiber pretreatment 5722
Toray Industries' Atlan acrylic fibers, asbestos substitute. properties and production plans 4830

AUTOLEVELING, SEE DRAWING, DRAWING MACHINERY, UNIFORMITY.

AUTOMATION (SEE ALSO UNDER HEADINGS OF SPECIFIC PROCESSES)
air jet. Lindauer Dornier Model DLW loom 8261
air jet. Picanol PAT-A loom. PRA1 subsystem, Pick Repair Automation 4191
apparel companies. survey of amount and impact of computerization of apparel functions 2280
apparel factory of the future. making-up, final control, finishing 7664
apparel industry, United States. survival depends on automation, robotics, computer integrated management 5342
apparel manufacture. computer systems to improve real time production control 8757
apparel manufacture. improved sewability, fabric simulation software 8592
apparel production, fashionably variable. computer integrated manufacture 2807
bale pluckers 5739
batch dyeing and printing machines 1948
Batelle designs robot to test protective clothing in simulated, hazardous conditions 7097
BEA 100 bobbin emptying device from Buehler-Regina 1284
Bellini. dyehouse improvements with robotized con 6875
Benninger tensioners with automatic section tension control. UZ type 7403
Benninger. thread tensioners and traveling blowers and cutters for high speed warping machines 8243
bobbins and skeins. management. personnel reduction 6899
Bullmer automatic cutting system for apparel industry 3717
bunker feeder field sensors, calculations to control fiber layer uniformity 108
calendering process control system. Ramisch Kleinewefers 7655
calendering. process control system. Ramisch Kleinewefers 3668
carpet finishing, monitoring, control systems for automatic straighteners 4388
carpet manufacturing and processing machinery displayed at ITMA [1987] in Paris 1001
carpet manufacturing equipment. ITMA [1987] showed various European innovations 2001
carpet weaving. ITMA [1987] trends 5862
centralized apparel manufacture systems at [1986] Bobbin Show 5364
centrifuge feed rate in wool scouring. automatic control 8465
clothing construction. complete systems being developed by Japan, United States, and the European Community 7868
Computer Integrated Spinning (CIS) systems 5762
computer integrated weaving with cloth beam handling and transport systems from Sulzer Ruti 3920
computer integrated weaving. automated cloth beam handling and transport system. robotics 5027
computerized systems for carpet mill. BGD Computer Systems 7881
computers and Data-Becker's Kalkumat program for the drycleaning industry 4563
cone winders and rotor spinning machines. P500 yarn clearer and greater yarn quality and cost effectiveness 7143
Conticon process automation system for jiggers manufactured by Kuesters 8444
continuous dyeing unit. Saic-Velcorex experiment at Colmar plant 6347
continuous dyeing. optimizing efficiency of short batches 5248
control, testing, computers in cotton industry in USSR 5522
cooking unit linked to sizer by computer. Procomat from Zell 4167
Corino's Normatex weft straightener with pin wheels 7652
Corolab. continuous yarn monitoring system for rotor spinning from Schlafhorst 3368
cotton testing equipment, applications and consequences 8682
current technology, trends in weaving automation. weaving in the year [2000]. future trends 5893
cutting machinery. advances due to increased competition. new technology 6982
cutting room. fabric spreading equipment from Gerber 2840
Cybrid System for pattern making. Lefort installation for shirt manufacture 3718
device for simultaneous measurement and turning inside out of full fashioned knits 8794
Digicone winding combines merits of precision and random

crosswinding 8250
dobbies, programmable computer controlled 4176
dobby. rotary. Model RD800 electronically controlled from Fimtessile 8275
dye laboratory converted into an automated production center 2733
dyehouse, Amital's. accurate color matching 8828
dyehouses. advances in ease of insertion and accessibility of information 6348
dyehouses. advantages of the use of automation 6349
dyehouses. trend at ITMA [1987] toward maximum electronic automation 7129
dyeing machinery. French robotization in bobbin handling and dyeing 5234
dyeing, batch. machines shown at ITMA [1987] for automated handling 6921
dyeing, exhaust. reducing costs, energy and water consumption 437
dyeing, United States mills moving toward automated dye dispensing systems 5476
dyeing. Sandolan MF dyes 442
electronic jacquards for narrow fabrics 2584
electronics in the control of wet processing operations 8437
elimination of tedious chores and the decrease of steps in spinning mill 8793
Elitex's installation of microcomputer control in spinning mill for BD spinners 4103
Eton 2002 system for optimal efficiency in cutting and piecing 7887
Eton's new automatic cutting system with transport to sewing station 8791
fabrics, functional characteristics studied to help develop automated fabric assemblies 2656
factory materials handling and storage 3141
fancy twisting machines. Saurer-Allma's ESP 1 and 2, FM-F 4128
feeding system for cutting lines. Ateliers 8843
finishing machinery at ITMA [1987] 3562
finishing ranges, wet 455
finishing, automatic garment feeding into steam tunnel 2069
finishing, dyeing, and printing. innovations at [1987] ITMA 6106
flatwork finishing systems. effectiveness of automatic feeders 4583
Fleissner's two process carpet finishing line and dye applicator 4389
Flexible Manufacturing System (FMS) from Rieter 7156
Flum's automatic packaging system for fabric rolls and bales 5534
formaldehyde stripped from air to water at pH 2.0 with automated system 4683
future of automation in loom, weft insertion improvement 8277
garment and flatgoods automatic folder from Automated Textile Systems 6978
garment manufacture, fully integrated, FIGARMA. problems in automating the sequential sewing assembly 1506
Germany. automated processing at [1987] ITMA 7935
Glendale Spinning Mills, Ontario. reorganization by First Corporate Equity Group 3091
Grob's Sensitron. electronic thread breakage indicator linked with electrical warp stop motions 3446
Grob's warp stop motion machines 4200
Gruppo GMT apparel manufacture and Gerber CAD/CAM systems 6977
GTM loom by Picanol. possibilities for future developments 6641
Haigh-Chadwick Microweigh hopper. automatically weighs fiber prior to carding 5734
handling and transport of beams. first step in computer integrated weaving system from Sulzer 8251
handling equipment for knit fabrics 6985
handling machinery for the automation of a Textilsusa plant 8818
handling of stock. time saving step. use of conveyers and trolleys 7130
hosiery equipment and manufacturing procedures at International Hosiery Exhibition 8589
hosiery, men's underwear 1866
Hungarian textile mill offices. Telex systems, electronic mail, interoffice communications 702
hydraulic unwinder for films and nonwovens from Christian Maier. automatic splicing 7900
IMB [1988], pressing machinery. advances in programming, automation 6194
Imece steam ironing presses. examples of their range for knitted wear 8606
INA Systems Suspension/Bundle Online Real Time Production Management System in Swiss garment plant 3714
Incas' plants for automatic weighing and for the control and analysis of production 8792
industrial robots in German apparel industry 6970
Innovations shown at ITMA [1987] for garment dyeing of knitwear 5847
inspection machines. computerized management of defects. innovations shown at ITMA [1987] exhibition 7869
installation. decision based on process costs 4712
Integrated Color Network from Datacolor. quality control for finishing industry 4390
Integrated data analysis system at Du Pont's Textile Fibers Manufacturing Department 2286
integrated. printing and finishing, Total Systems Control by Stork 6129
integration of PLC systems for automation of single units or complete production lines 7131
International Textile Machinery Exhibition [1987]. automation and instrumentation 6629
Investronica Matching System. cutting and matching striped, checked, and printed fabric electronically 1518
Investronica's Matching System for automatic cutting of patterned fabrics 1285
IRO's Iro-Sox stitch length control system for sock knitting 4232
ITMA [1987]. electronic machinery for nonwoven manufacture 8380
ITMA [1987]. weaving machinery advances, automation, robotics, electronics, speed, new materials 5023
Iva Manufacturing profile. investments in automation. long term ROI strategy 5355
Japan. textile and textile machinery industries overview. production control system in weaving mills 7877
Jasper material transport for yarn winding and dyeing without personnel 3578
Karl Mayer RJSG 4F-NE jacquard raschel machine. electronic jacquard selection process 5086
KFW1250 and 2450 stop motion devices from Grob 8269
kitchen. Van Wyk fully automated color kitchen at Walsden Printing 2759
Klopman International modernizes workwear operations in Italy 1187
knitting machine, flat, Sirio 4000 from EMM. computerized patterning 5942
knitting machinery accessories from Mayer & Cie 5073
knitting machinery. ITF-Maille. advantages and disadvantages 7132
knitting machines, flat. retrofitting for electronic pattern preparation on Emmetronic 1 and 2 models 1020
knitting, circular and flat, at ITMA [1987]. innovations from Mayer 5059
knitting. reducing setup time by improving machine technology 5058
knitwear manufacturers, South Carolina, to increase productivity 5921
latest spinning machines. spinning line and its components, automation 3346
Lips Burger Zeist laundering plant, the Netherlands 2863
Loerrach Technical Textiles. transition to computerized operation 8802
looms. advancing designs at ITMA [1987] with automation 4185
looms. developmental trends. automation. success criteria in weaving 7413
looms. Dornier systems 1756
looms. electronic control. automatic logging. data performance 2576

Mahlo's Orthomat RFMC-9 straightener unit with FMC-9 scanning system 5324
Mahlo, Schlafhorst, Kannegiesser advances 7894
management roles in integration of the automated manufacturing environment 7889
manmade fiber spinning machinery developments. electronic process controls 1666
Mayer Coner RC 10 NG automatic cone winder installed at Danspin. woolen yarns 5005
Meritina invests in Kuris Pioneer Super II spreading machines and cutting tables 5377
microprocessor control system for web guidance, Erhardt + Leimer's Elcom 18 unit 4721
Microweigh automatic hopper for woolen carding 2501
Minnetti's Apollo robot system. loading and unloading 5543
Model 14 122 Liropol pile warp knitting machine from VEB 8324
Model 222.11 dye padder from Kuesters with automatic fast cleaning 5236
Model BDA 20 open end rotor spinning machine from Strojimport 3369
Model DJE-2 large diameter double jersey knitting machine from Jumberca. electronic individual needle selection 8303
Model SJE-2L circular knitting machine from Jumberca 6699
Models NCI and BCI/BCF full fashioned knitting machinery from Scheller 8323
Modular hank yarn drying range from Galvanin 5319
Murata's Twister 377, automated two-for-one twister. features, advantages 6597
MW knit fabric inspection unit manufactured by Erwin Sick for circular knitting machines 8287
MWG Apparel. Canadian shirt manufacture. highly automated production system using Gerber and Eton machinery 2130
needle blanks, single automated operation due to new technology 5359
New Zealand slipe wool industry 2432
Nisshinbo Industries spinning mill, operations and reasons for high efficiency 2517
Noy Engineering plants for production of synthetic fibers 6514
open end spinning in Czechoslovakia. move toward mass production 4932
overhead, automated transportation system for a textile mill, parameters 4732
overview. accurate and objective testing by automatic multi-functional apparatus 8224
packaging machinery for woven fabric for finishing 737
Picanol manufactures Pre-Winder Switch Off for automated weft repair on GTM rapier looms (Trade Lit.) 8248
Picanol PAT-A air jet loom with automatic weft break repair system PRA 1 subsystem 5881
piecing. end transfer apparatus attached to dual chuck continuous yarn windup 4951
printers, screen, from Zimmer 8536
printing paste, preparation 5296
printing work room by Stork-Brabant for Laura Ashley. future developments 6848
printing, colorpaste preparation in laboratory, automatic 5283
printing. automated color kitchens. evolution 6925
programmable applications system for apparel industry robots 7870
PSO weft repair system by Picanol for their GTM rapier machines 7422
Quick Response technology at J. C. Penney 716
rapier. Model PM100 loom from Crippa Mario 8263
resin impregnation system developed to adapt braiding to automated production of advanced composites 7463
results in spinning preparation. priority to machine efficiency 7370
ring spinning machinery exhibited at Paris ITMA reviewed. future prospects 955
robot system by Sulzer. applications in automated weaving 5037
robotic mannequin being developed to test protective clothing for hazardous conditions 7850
robotics for carpet yarn spinning seen at ITMA [1987] in Paris 2514
robotics for materials transportation in mills 5497
robotics in apparel plants, ShBM-150 device for fabric roll transport 4531
robotics in preparatory dyeing processes. hank loading and unloading 6831
robotics, key factors before installation 6360
rollpadded lapels. rollpadding automat KA, features and jacket construction 6181
Rosso manufactures Rototurn. automatic sock turning device 4226
Rotamac 4 and Hydromag 6 printing machinery from Buser 2778
Saurer's electric drive system for automating embroidery machine functions 3712
Saurer-Allma TM two-for-one twisting machine with robotic bobbin conveyance and driverless pin carriage transport 6598
Scaglia's Robot Automatic Doffing system 5755
Scheller full-fashioned knitting machines. Models NCI and BCI/BCF 6712
Schlafhorst's Autoconer 238. automatic cone winder 5859
Schlumberger's Model CF 43 ring spinning machine 5767
Schubert and Salzer's Ru 14 Spincomat. automatic open end rotor spinning machine 5778
Schweiter conveying systems. CON-CO-MAT and RING-CO-MAT 4108
Series 2500 negative dobby and Type 2680 positive rotary dobby looms. Staeubli 4184
sewing equipment, automated from Schips, for trouser and pocket assembly, label attachment 2848
sewing machines. study to create production system accommodating range of fabrics 557
sewing mills. mechanized storage and transportation system, reduced labor consumption 529
sewing system for Japan's apparel industry, research and development review 2013
sewing. Shenkar system, robotic sewing system for apparel production 7681
silk degumming. possibilities for automation of process. lab results 6845
sinker knitting, automated graphic representation using universal code 5506
size cooking plant, Zell's Procomat 5842
Solis manufactures automated machines to manufacture and handle pantyhose 4227
Soviet knitting industry. areas and goals 5063
Soviet weaving industry. automation and computer use 5025
spinning machinery. winders and twisters. developments shown at [1987] ITMA 6579
spinning of cotton. drawing fibers from bales. reattachment of yarns 7372
spinning plants in United States 2511
spinning preparation for short fibers. recent developments in processes 7369
spinning, ring and rotor. short staple fibers. future prospects 4929
spreading machinery and operations 2819
spreading machinery, features and models 6195
Staeubli's Type CX 860 Jacquard machines with electronic controls 4202
Statistical Process Control implemented at Monsanto (Conf. Paper) 8762
Stedman Corporation, automated sewing equipment from Union Special 5387
Stork Total Systems Control for wet processors 3121
Style 2800 CU automatic rib cuff setting station from Union Special 4556
systems from Ivanovo SKB SM, abilities 5523
TALC. Electronic Data Interchange and Quick Response 795
Team-tex uses residual yarn automatic cone winder from Karl Mayer to rewind waste thread 8195
technical advances displayed at [1987] ITMA 6637
technological advances and reality of automated yarn manufacturing plant. ITMA [1987] displays 2496
tentering. computer control and quality control 5335
textile factories of the future. computer systems managing

production. customer orders basis for production planning 3918
textile mills. executives share their views 5510
texturing machinery. innovations at ITMA [1987]. management and control 6604
Texunion DMC. computerized weaving, spinning, dyeing operations. robotics for materials handling 5504
titration and dosage device. use in silk degumming 6090
transfer line, automatic, developed by TC2, used by Greif 4729
transport automation in a filament yarn plant by Uhde 7133
transport automation, driverless. Schoeller Bregenz 4111
TRASS sewing systems developments [since 1983] reviewed 3707
Truetzschler's Feed-commander FCT and electronic plant control RAS for spinning preparation machines 5738
tufting machinery at ITMA [1987] 4298
tufting process. Hollytex Carpet Mills 2162
ultrasonic cutting of pre-impregnated composites from Design Technologies 4539
Universal's Model MC-613 double system electronic jacquard/transfer machine 4247
USK-toptronic warper from Hacoba 8246
vacuum slots for washing ranges developed by TEV. manual and automated adjustment 5314
Valstar installs production control at Don and Low. fabric producer 5505
variations in synthetic fabric lengths. compensation by automatic cutting control systems 6184
Ventura Rapide manufactured by Longclose. rapid fabric dyeing machine with low liquor ratio 5240
Viascan system for producing and processing color patterns for jacquard weaving. Viable Systems 8252
Vollenweider's Super Duplo Scantex cloth cleaning and shearing machine with automatic inspection 4414
Vollenweider's Super Duplo with automatic cloth inspection and Peerless 4416
Voluntary Inter-Industry Communications Standards. Universal Product Code and Electronic Data Interchange 796
VS 2 size preparation installation and Sucker-Mueller 5843
warping and beaming machine, USK-toptronic, from Hacoba 5829
warping machinery, section. USK-toptronic. Hacoba 6634
warping processes, automated through remote control and robots 3135
warping, section. tension control 4168
warping, Supertronic section. from Benninger 4161
weaving, for jacquard towel pattern 219
weft break repair on air jet looms at [1987] ITMA 6671
weft insertion. developments for automatic starting after yarn breakage 7423
wet processing. controlling chemical concentration 8454
winder, air entanglement, from Belmont Textile Machinery. automatic. multifilament yarn 3425
wool handling system, improved stacking patterns for bales 2425
wool, worsted system spinning machinery from Cognetex, Zinser, and Uster 956
yarn make-up and handling machinery moving toward higher levels. ITMA [1987] demonstrated 958
yarn measurement 6268
yarn numbering system, semi-automatic. classification measuring independent of operator 6267
yarn package inspection and handling 8189
Yarntester unit by Superba. objective testing of spun yarns. cost reduction 6610
Zinser's Guard system for ring spinning machines. monitors spinning positions 5770

AUTOMOTIVE FABRICS

Amaretta synthetic suede by Kuraray. automotive interior applications 339
automakers, expectations for fabric suppliers 4300
blue wool sample for weathering testing of polymeric materials. relative humidity problems 7095
Burlington's sale of W.G. Lord auto fabric plant to J.P. Stevens. Stevens' expansion plans 3086
electron shape in field sensors, formula, automated systems 5519
fabric products. requirements, test methods 7075
fibers. transfer in automobile carpeting. forensic research 3818
filter media, fibrous nonwoven. structure and mechanisms 5998
finishes, Baygard SF and SF-A from Bayer 6150
IAA International Motor Show highlights. nonwoven adhesives, automotive textiles, hot melts 356
industrial textile manufacturers and automobile industries in the United States, Japan, and Western Europe 1821
International Automobile Show in Frankfurt. nonwovens 6736
jacquard plush 8351
Lutradur. polyester spunbond used to reinforce polyurethane in construction of automobiles 2482
Mayer tricot machine with five guide bars produces advanced car upholstery fabric 1021
multi-axial fabric technology 1801
nonwoven filter media. constructions and filter mechanisms 3546
nonwoven industry. investment strategies 1157
nonwoven, spunbonded Lutradur. plastic reinforcement 6065
nonwovens and woven fabrics in industrial textiles. applications 6808
nonwovens production technology 3497
outdoor testing cabinets for automotive fabrics 7069
patterned velours. double bar velours raschel machine RD 7 DPLM 12-3 EBC/EAC, seven guide bars 1006
polyester, producer colored. Eastman and Kanebo joint marketing 4860
polypropylene use increasing. stain, light, abrasion resistance 3549
polystyrene developed to replace blue wool in automotive fabric exposure testing 7096
powder lamination, advantages over flame lamination. process details 1137
preneedled felts for automotive industry with Di-Loop needle loom from Dilo 3488
Sandoz Foron AS dye for polyester. lightfastness in automotive fabric applications 6906
Sausis control for textile transportation. reduce stretching, accuracy 5498
seat belt requirements in the United Kingdom 6048
seat cushions and back-rests, vacuum formed fabrics, foam filled in place 2828
seat fabrics from Foss Manufacturing 1879
standards evaluated 7045
statistical service life prediction criteria 7070
sunlight through automotive glass. actual and laboratory tests, results, discrepancies 7071
Techtextil Trade Fair, Frankfurt, technical fabrics, fibers 6421
testing and applications 6246
trim market in the automotive industry, use of industrial fabrics. industry future 6787
ultraviolet spectra in sunlight through automotive glass. objectivity of accelerated testing 7072
United States automobile industry. Japanese competition 1410
university students and attitudes toward fashion, purchasing 7013
water jet cutting system from Flow Systems. diaper and automotive applications 1041
window fogging caused by volatile compounds in fabrics. inferior test methods need improving 7087

AUXILIARIES, SEE DYES AND DYEING ASSISTANTS, TEXTILE CHEMICALS.

AUXILIARY EQUIPMENT (SEE ALSO UNDER HEADINGS, SUCH AS COMPUTERS AND PROGRAMMING, DRIVES, ELECTRICAL EQUIPMENT, ENERGY, MILL BUILDINGS, POWER CONSUMPTION, TEXTILE TESTING)

accessories and auxiliary equipment for knitting industry at [1987] ITMA 3942
accessories for looms. yarn tension and warp guiding systems at [1987] ITMA 3432
advantages of electric drycleaning units over steam. costs and maintenance 2047

aerodynamic design, waste removal devices for rotor spinners 4104
air jet spinner twister automatic checking device for PSK-225-ShG 131
automated systems from Ivanovo SKB SM, abilities 5523
Azapil photoelectric testing device for knit fabric pilling determination 4351
canalization, water conservation, automated sampling system 5554
cans, spinning, model S7 from Gmoehling 5787
circulating pumps. instrument designed to test performance 6890
cleaning drop wires, ultrasonic device from AGMueller 6652
Compactlifter transporter from Contex 4736
contact finishing, measurement of finish evenness with MMP-1 radiation device 4693
dobbies, Jacquard machines, and auxiliaries manufactured by Staeubli 4154
drawing-in machine computer-controlled. Uster Delta CC 6642
dye, additive economy in Hungarian industry 4429
electric drive system for embroidery machines from Saurer 3712
Electronics in Textiles conference. quality control in manufacturing machinery 3117
Examat linker for increasing productivity in full-fashioned knitting 8280
FA/S spark eliminator from Jossi built into the flock conveyor line for spinning plants 3345
Fadis HPF yarn wrapping machine for elastomeric core yarns 162
feeding, folding, finishing machinery at Laundry and Cleaning [1988] exhibitions 6200
filling feeder yarn advancement system from Tecnomatex 3445
finishing. guiding cloth and weft straighteners. ITMA [1987] exhibition 7551
footwear creep ascertained by shaped lever tester 5106
Grob's Sensitron. electronic thread breakage indicator linked with electrical warp stop motions 3446
heat recovery from finishing wastewater, conversion device for dyeing 5272
high tear load fabrics, tensile testing on PD-40 and adaptation mechanisms 5468
Hoerauf Maschinenfabrik apparel wrapping and packing systems 3925
IEZ-P, INEP-11D static control, measurement devices 733
imitation model using, scanner control for fabric uniformity, design, abilities 5518
Investronica's Matching System for automatic cutting of patterned fabrics 2836
ITMA [1987]. auxiliary equipment, transport, testing systems 7178
ITMA [1987]. knitting industry. new developments and technology 7437
Joel and Arnoff's Badger 3 heat seal machine to construct and apply labels 4564
Joyce-Lebel 3CS computerized optical measurement device for yarn density 4668
Kaelin fan nozzle fabric cleaning system removes dust, lint, fiber fragments 2721
knitting machinery, circular. Mayer & Cie 5073
knitting. ITMA [1987] 5941
Knotex Plus drawing-in system with HIS shaft pre-selector 5890
KSL (S. M. Kirov Institute) device for fiber orientation, straightening tests 4087
lubrication system and tests, no oil spots, operational systems 5074
Martin Worldwide's Model 6000 bobbin stripping machine. solves problem of waste yarn left on carriers 3344
melt spun filaments. air quench chimneys 8064
moisture in unwashed bales of wool. PKVNSh testing device 734
mounting and transport truck for fitting, dismantling, transporting SU units 1516
NK30 optical light sensor to detect needle defects on circular knitters 4253
Novatherm Kilmageraete humidity control systems to maintain textile quality 3935
oiler, pressure, for circular knitting machines. Pulsonic 2 unit 5933
overhead, automated transportation system for a textile mill, parameters 4732
PA-250 device to separate warp yarns in loom, for cotton yarn weaving 4178
pad. Bicoflex from Ramisch Kleinewefers 3615
pin arrangement from H. Schirp in tearing cylinder to cut down fiber waste during opening. recycling 3326
pneumotransporter, burning fiber waste, prevention, analysis of fire source 5524
positive yarn feeds. underlying principles. lists of manufacturers and products 2596
Prokostop 4408 computer controlled warp sheet monitoring device 8270
robotics in apparel plants, ShBM-150 device for fabric roll transport 4531
Russian unit to detect singles yarns. system features and operation 109
Saurer electric drive unit for embroidery machine operation 6983
sewing machinery attachments for upholstered items, bias cut bands from CF Italia, Atlanta Attachments 7694
sewing mills. mechanized storage and transportation system, reduced labor consumption 529
sewing production lines, transportation and storage equipment, speeding knitted apparel production 527
single bed, roller fabric transport system. defects and measurement system 7162
SKF. individual motor drive system. bottom apron cradle and stop motion 5737
Sonoco's Positrol plastic yarn tubes for yarn take-up, features and availability 5860
Soviet photoelectric non-contact sensor for linear density measurement 4662
spinning cans, S7. Gmoehling 5772
Staeubli Programming System 18 for dobbies and card cutting machines. portable programming device 18-58 II 8809
Staeubli Programming System 18 for dobbies and card cutting machines 8805 8807
Staeubli Programming System 19 for Jacquard machines. Jacomat software 8808
Staeubli's Type CX 860 Jacquard machines with electronic controls 4202
STB sensor system for draw loom, control, components 4198
Steiger's Electra models with needle beds for knitting notions 5080
storage pallet for fabric rolls and efficiency 5525
SwissLink reusable end rings by Elasaesser Maschinenhandels 8535
Tamarack Sales' two new yarn tension control devices, 502 and 402 models 3133
thermal exchanger reuses heat energy from steam and water during drying 5530
transport and materials flow accessories from BAKA, Blickle and Wanzl 3927
transport systems, Innovatex. cardboard sheets, package columns, sliver cans, rovings, and cones 5724
truck from Contex. Compactlifter for moving warp beams and fabric rolls 4741
ultrasonic device to join nylon 6 sliver, yarns during ring spinning 959
ultrasonic spray nozzles by Sono-Tek 3926
vibrotransporters for apparel components, tests for proper air pressure levels 4733
VPZ control system for transportation of textiles, computers 4731
warp tension ring. method for designing curve for triaxial loom compensator 8328
washing simulator, dye resistance tester 4682

AVISUN IS AN OLEFIN FIBER.

AVLIN IS A POLYESTER FIBER.

AVRIL IS A RAYON FIBER.

BACTERICIDES, SEE ANTIBACTERIAL AGENTS.

BAGASSE

BAGS (SEE ALSO OTHER HEADINGS, SUCH AS FABRIC PRODUCTS, HOME FURNISHINGS)

BALING
cotton processing. unfavorable plant conditions 7988
Fleissner. manmade fiber production machinery 5743
ITMA [1987]. automation in spinning processes 4099

BALLOONS
rotor, balloon shape, tension control, yarn guide displacement 4934
tension in balloon, equations based on data for warping procedure 5002

BANDAGES, SEE SURGICAL PRODUCTS.

BAST FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS DEGUMMING, FLAX, HEMP, JUTE, LEAF FIBERS, KENAF, RAMIE)
bamboo and polymer geogrids. shear behavior testing 6772
finishing and dyeing at Central Research Institute for Bast Fibers 5168
recycling packing of bast fibers into spinnable material 3207
Tosco Dia NF flame retardant fabric 8376

BATTINGS (SEE ALSO OTHER HEADINGS, SUCH AS NEEDLED FABRICS, NONWOVEN FABRICS, SANITARY NAPKINS AND TAMPONS)
bedquilts. production process 8607
knitting fiber wastes 8344
pressure roller, improved battings with roller lubrication, humidity 4902
wool crimping gives extra loft for bedding applications 8004

BEAMING, SEE WARPING.

BEAMS (SEE ALSO OTHER HEADINGS, SUCH AS LOOMS, WARPING MACHINERY)
automated handling and transport of beams by Sulzer. first step in computer integrated weaving system 8251
Barmag draw warping and draw sizing machinery for polyester yarns 8135
Benninger's ZDA and ZDAk direct beamers 5827
Benninger. direct beamers Type ZC-R 8234
diagonal yarns from warp beams on RS 2 DS multiaxial raschel machine 1027
efficiency. parameters influencing efficiency 5003
Hacoba model GRS unrolling creels for tape material 5831
Hollingsworth's MSL-Universal 6.541 automatic warp sampling machine 5849
ITMA [1987]. weaving preparation 5856
Karl Mayer's direct warping units, type DS 5832
mathematical model of tension state on beams 4172
multi-beaming techniques. product development 8233
Reed-Chatwood UW warper and UW beamer 5853
rotation angle shifts due to vibrations on machinery. calculations, control 5026
Sharp PC 1246 S mini pocket computer. warping and beaming 5503
sizing machinery. ITMA [1987]. various manufacturers 5841
Sucker + Mueller's WR-M and WR-C beamers 5828
USK Toptronic cone sectional warping and beaming machine from Hocoba 6623
USK-toptronic from Hacoba. machine features, operations 8245
USK-toptronic sectional warping and beaming machine from Hacoba 5829
warp yarn, geometric relation from the beam to the back rest to the warp stop motion 5034
warping, beam. narrow quality tolerances. Mayer's DS 42/35 NC beam warping system 5830
yarn assembling installation from Zell 4955

BEDDING, SEE BATTINGS, BLANKETS, HOME FURNISHINGS.

BIBLIOGRAPHIES (SEE ALSO OTHER HEADINGS, SUCH AS BOOKS, ANNUAL REVIEWS AND DIRECTORIES, AND UNDER SPECIFIC SUBJECT)
aluminum matrix, ceramic particles, short fibers, whiskers as reinforcement. review of literature 878
composite nonwovens, high added value. production 5985

BICOMPONENT FIBERS
core shell type fibers. spinning parameters and viscoelastic properties 7300
Enka's polyester-polyethylene fiber in thermobonded nonwovens. melting point properties, bulk and hand discussed 1644
HDPE/PET. orientation stretching 8023
identification, solvent test for fiber. blends, modified, and bicomponent fibers 1444
India. dry spun monocomponent and bicomponent acrylic fiber. prospects, consumption data 6489
No Shock Nylon from Monsanto. process and properties 2451
PABI/CPAN. structure and properties 7299
poly(p-phenylene benzobisthiazole) (PBT) and nylon composite fibers. method. properties 7350
polyamide/copolyamide. side-by-side bicomponent fibers. structure, properties 71
polyester/polyethylene bicomponent fiber by Enka for thermal bonding of nonwovens 47
Supacryl bicomponent acrylic fiber from Indian Petrochemicals 1641
thermal underwear fabrics. Stretch Dryline from Allied Fibers with nylon, elastomer and absorbent components 8628

BINDERS, SEE ADHESIVES, CARPET BACKINGS AND BACKCOATINGS, FLOCKING, LAMINATED FABRIC MANUFACTURE, NONWOVEN FABRIC MANUFACTURE.

BLANKETS (SEE ALSO OTHER HEADINGS, SUCH AS HEALTHCARE AND MEDICAL TEXTILES, HOME FURNISHINGS)
automatic blanket sales down, supplier innovations 2998
bedquilts. production process 8607
nonwoven products manufacture. needle punching, from BTRA 6727
quilted bedcovers exhibition at the Wadsworth Atheneum in Hartford. [1700-1987] represented 2999
woven cotton throw market. rapid growth, but factors leading to shakeout are examined 1411

BLEACHING (SEE ALSO OTHER HEADINGS, SUCH AS DISCOLORATION, OPTICAL BRIGHTENING)
atmospheric versus pressure bleaching of fabrics 6841
bleached fiber. Edward Hall plant for continuous cotton processing 4817
chlorite process. economical, environmentally safe. wastewater treatment eliminated 6823
colorfastness to bleaching with sodium percarbonate. test method 3053
combination bleaching and scouring process. sodium chlorite 6824
conference, West German Dyer's [1988] 6830
control of chemical concentration 8454
cotton fabrics, green motes destroyed by using hypochlorite and hydrogen peroxide 5178
cotton fabrics. optimum processing with sodium hypochlorite, hydrogen peroxide 8449
cotton fabrics. preparation for dyeing 6089
cotton fibers. 2,2'-bipyridine catalyzed bleaching with peracetic acid. peracetic acid decomposition 2722
cotton fibers. distinguishing bleached and unbleached fibers with thermogravimetric analysis 8155
cotton yarn with hydrogen peroxide. cotton knitwear with chlorine

peroxide. shortened methods 1900
cotton. peracetic acid catalyzed to bleach cotton fibers with 2,2'-bipyridine 3567
cotton. sodium hypochlorite and hydrogen peroxide 6825
defects. German research 7566
emissions. alkaline aerosols, heat and steam release during alkaline-peroxide bleaching 392
flax and flax-type woven fabrics with oxygenated water and ultraviolet radiation 3566
hydrogen peroxide bleaching and the role of organic stabilizers. advantages of Alcobleach HP 7567
low solvent-assisted process combines desizing, scouring and bleaching 6826
Marvantex RBDS. buffered agent for bleaching and dyeing cotton hosiery 8487
mathematical analysis of single stage preparatory process for cotton using sodium hypochlorite 8722
non-acidic bleaching with rongalite and Trilon B. less damage to cotton fabrics 4403
PALF yarn. bleaching effects on tensile behavior and processing 4150
pretreatment processes for cotton fabrics 3570
ramie fiber bleached with sodium hypochlorite and hydrogen peroxide. fiber degradation. chemical absorption 5176
Shockstream from ASISA. continuous open-width processing of woven cellulose fabrics 7568
single stage process for cottons, advantages 8450
sodium chlorite for combined scouring/bleaching of polyester/cotton fabrics 5184
stripping of dye from synthetic fabrics. BTRA process eliminates most problems 7586
textile chemical processing. water management 8446
wool bleaching with thiourea dioxide 8451
wool bleaching. technological developments 2723
wool, removal of discoloration 6835

BLEACHING AGENTS (SEE ALSO OTHER HEADINGS, SUCH AS OPTICAL BRIGHTENING AGENTS)
ADA-SPN hydrogen peroxide activating agent, SDA-PS hydrogen peroxide stabilizing agent 394
chlorine. effect on colorfastness of cotton knit fabrics dyed with reactive dyes 395
control of chemical concentration 8454
cotton fabrics. optimum processing with sodium hypochlorite, hydrogen peroxide 8449
mildew stain removal with chlorine bleach 584
non-acidic bleaching with rongalite and Trilon B. less damage to cotton fabrics 4403
optical bleaches. effect on photochemical fading in polymeric materials 8106
organic stabilizers in hydrogen peroxide bleaching. Alcobleach HP 7567
oxygen-based chemical bleaches for textile rental industry 5393
peracetic acid catalyzed to bleach cotton fibers with 2,2'-bipyridine 3567
pollution standards, West German, create problems for launderers and drycleaners 3950
quaternary ammonium compounds in wet processing 7552
ramie fiber bleached with sodium hypochlorite and hydrogen peroxide. fiber degradation. chemical absorption 5176
sodium hypochlorite and hydrogen peroxide. cotton fabrics 6825

BLEACHING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS DYEING MACHINERY, FINISHING MACHINERY)
atmospheric. Mather Machinery's Vaporloc system 8464
batch-steamer from Menzel. winding machinery for fabric rolls 747
continuous preparation range from Babcock, singeing, desizing, scouring, bleaching. operational details 6844
continuous processes for knit fabrics 7561
cotton fabric, tubular. Friedrichsfeld installs large scale sodium chlorite range in Turkey 8453
cotton fiber and yarn bleaching and dyeing machinery from Polmatex-Cenaro and Dofama 4391
ITMA [1987] highlights in wet processing. advanced technology, developments 4393
ITMA [1987]. innovations in wet processing machinery. application of process control 6821
ITMA [1987]. knitgoods finishing machinery 6093
ITMA [1987]. pretreatment systems 4409
ITMA [1987]. wet processing machinery 1237
Model LC Two Flow continuous rope washing machine from Brazzoli 5237
Shocksteam from Asisa. simultaneous scouring and bleaching of open width fabrics 8452
Super Scour and Bleach Plant from Calico 1189
Vaporloc from Maher. bleaching and scouring cotton and polyester blends 6087
Vaporloc from Mather Machinery 6088

BLEND TESTING (SEE ALSO OTHER HEADINGS, SUCH AS FIBER TESTING, TEXTILE TESTING)
American cotton studied to determine criteria for designing cotton mixes for spinning 6433
formula to predict amount of a given fiber in a blend, tests on cotton/viscose, cotton/nylon yarns 4076
photoelectric method to determine pilling resistance on woven wool blend fabrics, formula 4357
silk/nylon 66 fabrics, dyeing behavior 6932
yarns. dielectric perturbation of components 8699

BLENDING (SEE ALSO OTHER HEADINGS, SUCH AS BLEND TESTING, BLENDS, DRAWING, OPENING)
air jet spinning. Heberlein HFP. blending of elastomeric and staple yarns 5741
blowroom and drawframe blending of manmade and natural fibers 2499
cotton and cotton system wastes. blending, roving, open end spinning, yarn uses 4097
cotton blender, mathematical model of continuous action, performance evaluation 110
current status and technical developments 5728
fiber blending irregularities. effects on quality of resulting blended yarns 5729
matrix polymer with crystalline polymer to synthesize polymer fibers 4874
polyacrylonitrile dyeability, suitability for blending 419
polyester (Lavsan) and steel fibers blended for filter fabrics. production 111
polyester/cotton yarn. differences in blending before carding and before draw framing 8146
preparation for small wool lots to achieve uniformity after carding 4828
yarns, carpet. polypropylene and polyethylene to reduce shreading 169

BLENDING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS OPENING MACHINERY, PICKING MACHINERY)
blowroom and drawframe blending of manmade and natural fibers 2499
cotton blender, mathematical model of continuous action, performance evaluation 110
current status and technical developments 5728
hopper feeder and multimixer. compared for uniformity, number of folds, and methods of feeding 4899
ITMA [1987]. automation in spinning processes 4099
ITMA [1987]. cotton spinning highlights 942
Laroche. wool opening, cleaning, blending, and recycling machines 1694
Masterblend system model 6.120 from Hergeth Hollingsworth 3327
Mixmaster blending system. bin-to-bin mixing. developments 927
South Carolina mills installing updated opening, carding, and blending machinery 2508
textile industry, computers for fiber blending, spinning, monitoring system 8815

Truetzschler fiber preparation machinery for nonwovens manufacture 3339
wool. continuous chlorination by Kroy process 6827

BLENDS (SEE ALSO OTHER HEADINGS, SUCH AS BLEND TESTING, BLENDING, AND UNDER HEADINGS OF SPECIFIC PROCESSES)
acrylic/viscose Siro spun yarns. effects of staple length, fiber denier, and strand spacing on properties 6600
alkaline and acidic processes with anthraquinone for flax/polyester 4085
all-knit protective gloves, cotton blends, uses, production 4621
angora blended yarn. blend ratio measurement using density gradient tube 663
bast blend textiles. dyeing and finishing 5168
behavior of Lenzing Modal viscose, alone and with cotton, in dyeing and finishing 3316
Belseta PS. polyester and nylon blend fabric for outerwear 6738
Belseta Super. polyester and nylon blend fabric 6737
bicomponent yarns with different staple length. properties of cotton/polyester yarn during spinning 3821
bleaching and scouring polyester and cotton blends in Vaporloc 6087
blend composition, test method for moisture content 8384
blends. effects of sodium hydroxide concentration, temperature and equipment on mercerization 7570
burn-out printing or chemical lacemaking. procedures and formulae 3640
Caronella Cloth from Carrington Apparel Fabrics, eighty percent polyester, twenty percent cotton 6739
carpet yarns. wool/nylon, in tufted carpets. WRONZ Chemset process 5812
chemical finishing of cotton and cotton blend knits 6939
Clover Cocktail. wool and acrylic blend capable of dissipating static electricity 939
cotton Kevlar 29 canvas fabrics treated with titanium dioxide and a fluorocarbon. weather resistance 2782
cotton, cotton/polyester knit fabrics, dyed with leuko ester dyes, effects 4353
cotton, polyester and viscose fine-titer yarns. performance in fabric production 3407
cotton, polypropylene, polyester/cotton woven fabrics, acid resistance, relation to hydrophobicity 4354
cotton. open end and ring spinning. influence of fiber parameters on quality 1702
cotton/nylon 6, high speed. pre-yarn processing, spinning, yarn properties 4927
cotton/polyester blend yarn with improved tensile properties 8173
cotton/polyester core yarn fabrics. influence of repeated launderings on air permeability 1298
cotton/viscose and cotton/modal. open end spinning tests 145
curing conditions. attachment of polyethylene glycol 2792
degumming mixed silk, nylon 66 fabric 8456
Dilasoft KLP Liquid concentrate. softener from Sandoz for cellulosic and manmade fibers and their blends 5158
drying, radio frequency. polyester/cotton warp yarns 5837
dyeing polyester and cellulose. one step XRD system 443
dyeing. polyester and polyester blend fabrics. high temperature dyeing with swelling agents 8492
fabric blends of Cordura high tenacity air textured nylon. new fabrics for hunters' and workmen's apparel 5126
fiber blending irregularities. effects on quality of resulting blended yarns 5729
finishing. combined bleaching and scouring. sodium chlorite 6824
flammability testing standards. need to upgrade to make test results more relevant 8719
flax/polyester (Lavsan). blend yarn and knit fabrics 4369
flax/polyester fabric. DEAE treatment for improved dyeability 2704
flax/polyester staple. formula to calculate tear load 5461
formula to determine amounts of various fibers in a blend yarn, example 4658
formula to predict amount of a given fiber in a blend. tests on cotton/viscose, cotton/nylon yarns 4076
glass/polymer shoe insole fabrics, tests for suitability, properties 4355
Harmonized Tariff System to affect blend levels of certain imported fabrics 5572
identification, solvent test for fiber. blends, modified, and bicomponent fibers 1444
ignition temperature of polyester/cotton blends at 950 degrees Fahrenheit 5132
industry. blends become more popular. with rising wool costs. Yarn Fair/ SOURCEAmerica [1988] 8229
introductory course to textiles and textile technology 7258
ITQT Digital Hairiness Meter. diameter and hairiness. comparison 3389
jute blend fabrics. thermal resistance measured by double-plate B54745 method 334
jute/polypropylene textured yarn properties 4142
knitted fabric possibilities. markets 3461
knitting, circular. synthetic filament and spun yarns. design 4237
manmade/cotton blended fibers. estimation of composition in binary blends using Brabender moisture tester 5455
microfibers used by Savina-Belseta and Asahi Chemical Industry for leather substitutes, filters, and apparel 4869
Norafin process for nonwovens and natural fibers 5973
nylon 6/PET polymer blends. structural and morphological features of melt spun fibers 5712
nylon/cotton union fabrics. nylon advantages over polyester 8388
Orlon acrylic fibers with manmade and natural fibers. Du Pont types of yarns, effects, and knit fashions 2536
Orlon and natural fibers. popular in knitwear 2942
outerwear yarns for [1989/1990 fall/winter] season. joining of natural fiber esthetics and synthetic yarn qualities 8226
PES cotton blends, finishing. Babcock's computer controlled continuous pretreatment range 4410
Piceme microfiber polyester/nylon blend composite fabric from Toray Industries 5090
pineapple leaf fiber and polypropylene 7985
pineapple leaf fiber/acrylic blend on jute spinning system 3352
polyamide and acetate combined yarns. Kompalen-D. properties 8172
polyester (Lavsan) and steel yarns for filter fabrics, production method 111
polyester fiber applications in Pakistan. blending, spinning 8947
polyester polyamide and polypropylene, for carpet backings 2000
polyester/copolyester fibers, hollow. microvoid development from alkaline hydrolysis 8110
polyester/copolyester fibers. kinetics and mechanism of alkaline hydrolysis 8106
polyester/cotton and polyester/viscose. comparison of effectiveness of screen printing with disperse and reactive dyes 6927
polyester/cotton staple yarn, pre-yarn processing, dyeing, spinning, twisting 4900
polyester/cotton yarn. ICI experiments in one-bath exhaust dyeing 8484
polyester/cotton. analysis with infrared spectrophotometry 3813
polyester/cotton. printing. thickeners. developments 6133
polyester/ramie blended fabrics. Ramzay finishing agent to control itchiness 2790
polyester/rayon, wet printing 466
polyester/silk and polyester/wool blends analyzed with trichloroacetic acid and methylene chloride 6266
polyester/silk waste blends, feasibility. optimal blend proportions 283
polyester/viscose blend yarns evaluated 6611
polyester/viscose blended fabrics. shear behavior analyzed with instrument based on design by Behre 1096
polynosic fabrics and blends, shape retention 7513
polypropylene fiber content in bicomponent blends determined using xylenes as a solvent 4838
polyurethane and halogenated polymers 5715
polyurethane and polyacrylonitrile. morphology and mechanical

properties 5652
pre-carding and pre-draw-frame blending of polyester/cotton blend yarns 8146
printing polyester/cotton fabrics 5282
processing wool/cotton blends. intimate and/or drawframe blending. dyehouse problems, apparel manufacture 4075
quality indicator determined for new woven blend fabric 5118
radio frequency energy for drying sized yarns of polyester/cotton 8564
ratio in ramie and cotton yarns. microscopic evaluation 167
research summary. thirty-five years of research 3238
rotor spun cotton, cotton/blend yarns. thickness, twist and staple length, relation to breaking load 6588
Ruco-Blanc OAO. fluorescent whitening agent for acrylic and polyamide blends used in hosiery from Rudolf 5194
SFK-1 self twist spinning system for PSK-225-ShG spinners, abilities 4117
silk and polyester (Lavsan). single bath, single color active dyeing 422
sodium chlorite for combined scouring/bleaching of polyester/cotton fabrics 5184
tenacity of Modal viscose/cotton blend yarns in fine weights in circular knit fabric constructions 3397
Texcellana, cotton/wool blend denim fabric by Texas Tech University 2630
Texcellana. cotton/wool yarn from Texas 13
Texcellana. Texas cotton and short-shorn wool 928
thermobonding units from Fleissner and Scandimex. use of synthetic pulp blends for disposable hygiene products 2625
tight warp and weft in polyester and wool blend worsted fabrics. causes 6750
Tricolino from Shikibo, triacetate yarn wrapped with cotton. fabric properties 6498
vacuum extraction in vat and vat/disperse union dyeing. polyester/cotton fabrics 4456
Vaporloc from Mather Machinery. pressure scouring 5185
viscose regenerated. adds sorption, moisture transport when knit with other fibers. fabrics 3256
wet printing methods, recipes for polyester/rayon 3642
wet processing of silk and blends. machinery, dyeing, finishing 6843
wool and polyester blend to form nonwoven melded fabric for office interiors 1816
wool and wool blends. finer weights. trends. strong wool market areas 4013
wool/polyvinyl chloride yarn and fabric blends, uses, properties 284
workwear fabrics, use of cottons and cotton blends. developments 5116
X-ray crystallography to identify fabric's fiber morphology 8710

BOBBINS (SEE ALSO OTHER HEADINGS, SUCH AS MARKING, WEFT MECHANISMS, WINDING MACHINERY, YARN PACKAGES)
Autoconer 238 by Schlafhorst 6624
BEA 100 bobbin emptying device from Buehler-Regina 1284
compactness distribution, radial. calculation 6576
diameter and density affects dye uniformity, fixation and sorption 4992
differences between various bobbins on the market. variables of operation 3411
dyeing, yarn package. Digicone. Schweiter 6126
dyeing. Digicone coning system. Schweiter 6104
flange bobbin deformation during winding. computer program for bobbin strength and rigidity 191
French robotization of bobbin handling and drying operations 5234
handling and transport system, automatic, from Neuenhausener Maschinenbau Havo 132
handling system, pick-up and transfer. Neuenhauser 5747
handling systems. conveyor, robot transfer, and pin carriage from Saurer-Allma 5796
ITMA [1987]. weaving preparation 5856
link system, Mayer Coner. [1987] ITMA 5788
link transport system from Hamel 5748
Martin Worldwide's Model 6000 Bobbin Stripping Machine 2299
multi-application winding machinery from Gilbos 6625
stripper from Martin Worldwide. cleaning out, waste yarn from carriers 3344
transport automation, driverless. Schoeller Bregenz 4111
transport system, link, from Hamel 5749
transport system, Spoolcreeler. condenser bobbins 5759

BOBTEX PROCESS, SEE SPINNING.

BONDED FABRICS, SEE COMPOSITES, FELT, LAMINATED FABRICS, NEEDLED FABRICS, NONWOVEN FABRICS, STITCHBONDED FABRICS.

BONDING (SEE ALSO OTHER HEADINGS, SUCH AS APPLICATORS, LAMINATED FABRICS, NONWOVEN FABRIC MANUFACTURE, SEAMING)
acrylates in nonwovens. determination of concentration 8737
adhesive for nonwovens. spraying techniques and processes used. advantages 6725
advances in processing and bonding. new nonwovens made with Fleissner equipment 5977
binder bonding and thermobonding assembly. Fleissner 5954
Bonar Carelle specializes in powder bonding in manufacture of nonwovens 8335
Butofan 45 from BASF. anionic dispersant for bonding nonwovens and coating or impregnating fabrics 6151
calender bonding. Meraklon fibers from Terni 5091
calender. Meraklon polypropylene fibers from Himont Italia, advantages 3289
carpeting systems. Contifi and Stoddard Holdings 7462
carpets, bonded. Titan II machine from Contifi 5092
cellulose pads. fluid transport studies 4625
chitin nonwoven manufactured by resin bonding with polymers 5137
continuous flat press unit developed by Stork Brabant 1063
crosslinked polyethylene glycol bonded to fabric. absorbency and wear 4299
Don and Low spunbonded nonwoven, Dal-Tex, for medical textiles 5992
Dragon system/GS from Hergeth Hollingsworth. production of sandwich nonwoven fabrics on one machine 3492
EDANA Nordic Nonwovens Symposium [1988]. technology, fibers, markets. superabsorbent polymers 6621
emulsion polymer binders for nonwovens from three monomers. performance advantage 286
emulsion polymers. simultaneous incorporation of salts of itaconic acid and hydroxyesters 46
fiber/matrix interfacial bondings, perfect bonding and complete debonding. elastic interaction among fibers 1440
Fleissner's line for thermal or foam impregnation bonding. high vacuum flow through drum for nonwovens and paper manufacture 3493
Grilon yarns from EMS-Grilon. heat degradable yarns used for fusible bonding and melt adhesive purposes 4979
Heat Wave Schaetti 89 powder-point bonding unit for coating nonwovens 7464
Hi-Tech heat bonding method developed by Fleissner 1061
Hof Nonwovens Seminar [1987]. highlights 3495
hydroentanglement bonding for nonwovens production. process, applications, developments 5950
INDEX [1987] Congress papers. binders for nonwovens. bicomponent fibers 45
INDEX [1987] Congress papers. meltblowns, spunlaced nonwovens, thermobonding 285
industrial textiles. thermal and adhesive bonding techniques 3508
ion-exchange fibers, bonding, sorption of insulin molecules, tests 5679
ITMA [1987]. nonwovens. equipment displayed 1152
latex bonding techniques for disposable nonwovens 5960

latex polymer bonding in nonwovens to improve strength and durability 4283
latex. nonwoven fabric manufacture 8345
meltblown. description 5979
Nitril-Static copper/polyacrylonitrile anti-static fiber. production and uses 4036
Nitto Boseki designs bonded glass fabric for printed circuit boards 6764
nonwoven and laminated structure bonding with thermoplastic, low melting, semi-crystalline polyester powders 1792
nonwoven bonding with water jets. Honeycomb and Perfojet systems 5953
nonwoven fabric manufacture. ITMA [1987] trends 5970
nonwovens processing method, spunbonding 6049
nonwovens. Hi-Tech thermal technique from Fleissner. uniform bonding of webs 3494
pattern bonding, resin. soft nonwovens 5984
polymer binders for nonwovens. formaldehyde-free, wet resistant and heat sealable 287
polypropylene, rayon, heterofil bicomponent, and cotton fibers in thermal bonding nonwoven constructions 3542
porous substrate bonded to substituted urea/urethane hydrogel 5107
rewettability of thermally bonded polyester staple, nonwovens 5999
self-regulating card feed and adjustable calenders for thermobonded nonwoven production 3501
spunbonding and thermal bonding in nonwovens production 1067
spunbonding, description 5981
strength of adhesive bonds between impregnated latex and nonwovens, influencing factors 4483
T-300 carbon fiber surface modification to enhance bonding. determination of chemical nature of treated fiber surfaces 7480
terry cotton bonded to a PVC resin backing. waterproof toweling 1434
thermal bonded polypropylene based nonwoven fabrics 6067
thermal bonding equipment for nonwovens from a variety of international companies 3504
thermal bonding of nonwovens. advantages, limitations. various systems 288
thermal bonding of nonwovens. grows in popularity at the expense of resin bondings 6714
thermal bonding with convection heat. equipment, operation, products 353
thermal bonding with the Enka polyester/polyethylene bicomponent fiber 47
thermal. fiber morphology 6068
thermal. nonwovens. testing 8715
thermobonded nonwovens, special fiber production. fusion bonding 355
thermobonded nonwovens. effects of pressure and temperature in roller nip. Thermo-Hydrein roller system 354
thermobonding and binder bonding assembly. Fleissner 5954
thermobonding fibers, PA and PES, from EMS-Grilon. mechanism and advantages 67
thermobonding fibers, PA and PES, from EMS-Grilon 280
thermobonding nonthermoplastic fibers into nonwoven fabric 5975
thermobonding polypropylene. effects of moisture 5986
thermobonding technologies from Honshu Paper for nonwovens production 2621
tire cord adhesion testing. cold bonded samples 6325
tire cord adhesion testing 6326
Trex Thru-Dryer by Honeycomb Systems. for drying, curing, bonding of dry-laid permeable webs 7472
Ultraloft powder bonded nonwovens. three dimensional printing 1878
ultrasonic bonding and laminating. technology, applications, equipment suppliers 1793
ultrasonic seaming of nonwoven products. project at Shirley Institute 8608
web bonding. needle looms from Dilo 6722

BOOKS (SEE ALSO OTHER HEADINGS, SUCH AS ANNUAL REVIEWS, BIBLIOGRAPHIES, DIRECTORIES)

A Practical Guide To Ring Spinning 952
American Association of Textile Chemists and Colorists Technical Manual 7957
Analytical Applications of Spectroscopy 7099
Analytical Approach for Understanding the Phenomenon of Warp Breakage in Weaving 3826
Analytical Methods for a Textile Laboratory 651
Annual Book of ASTM Standards [1987]. Section 7. Textiles 655
ASTM Standard Performance Specifications for Textile Fabrics. Second Edition 7255
ATI Directory -- The Textile Red Book 7968
Attaining Manufacturing Excellence 707
Book of Papers. American Association of Textile Chemists and Colorists. [1987] International Conference and Exhibition 402
BTMA [1988] Directory 1587
BTRA conference papers. dyeing of polyester, cotton, and their blends 3579
Buyers' Guide for machinery manufactured in Federal Republic of Germany and West Berlin 3941
Colour Index International, Third Edition (Volume 5) 7958
Colour Index International, Third Edition. Volume 8 (Supplement to Volumes 1-4, 6-7) 7959
Davison's Textile Blue Book 3180
Deming Management Method 3864
Developments in Oriented Polymers (Volume 1) 7301
Developments in Oriented Polymers (Volume 2) 6541
Directory of UK Dyers and Finishers, Including Bleachers and Printers 8921
Drying [1986] (Volume 1) 7962
Drying [1986] (Volume 2) 7961
Drying [1987] 7960
Effect of Heat Treatment of Dyeability, Glass Transition Temperature, and Tensile Properties of Polyacrylonitrile Fibers (Orlon 42) 1642
Essentials of Textiles 792
Fabric Inspection and Grading 653
Fairchild's Textile and Apparel Financial Directory [1988] 8922
Fiber and Textile Industries of the USSR, Eastern Europe and Yugoslavia [to 1990] 7931
Fiber Producer Conference [1988] -- Proceedings 8961
Future Trends in Polymer Science and Technology. Polymers -- Commodities or Specialties 6499
German Dyers' [1988] industry yearbook 2714
Handbook of Statistics on Manmade/Synthetic Fiber/Yarn Industry [1986-87] 7975
INDA-TEC [1987]. Book of Papers 5972
INDEX [1987] Congress Papers. Session A0. Mastering Change 1157
INDEX [1987] Congress Papers. Session A1. Fibers 61
INDEX [1987] Congress Papers. Session A2. Bonding Agents 45
INDEX [1987] Congress Papers. Session A3. Web Making (1) 1148
INDEX [1987] Congress Papers. Session A4. Web Making 285
INDEX [1987] Congress Papers. Session B1. Gas Filtration 1102
INDEX [1987] Congress Papers. Session B2. Apparel Technology 1138
INDEX [1987] Congress Papers. Session B3. Roofing 361
INDEX [1987] Congress Papers. Session B4. Agriculture 360
INDEX [1987] Congress Papers. Session C1. Hygiene Problems 295
INDEX [1987] Congress Papers. Session C2. Hygiene Solutions 294
INDEX [1987] Congress Papers. Session C3. Medical (1) 1116
INDEX [1987] Congress Papers. Session C4. Medical (2) 1111
Innovation and the Productivity Crisis 8923
Integrating the Automated Factory. First Edition 7889
International Nonwovens Directory [1988-1989] 7972
Introduction To Quality Engineering 2276
Just-In-Time Breakthrough -- Implementing the New Manufacturing Basics 3865
Manufacturing for the Competitive Edge 7164
Material Handling in Synthetic Textile Units 3921

Men and the Mills -- History of the Southern Textile Industry 7969
Needle Felts in Gas and Dust Filtration 1167
New Developments in Automotive Fibers and Fabrics 7045
Nonwovens Handbook 7971
Norms for Mechanical Processing. Fourth Edition 7978
Organizational Capital 3893
Petrochemicals. The Rise of an Industry 3276
Polyester Textiles. Papers Presented at a Shirley Conference [May 17/18, 1988] 8939
Polymer Science 7206
Practical Guide To Combing And Drawing 929
Practical Statistics For The Textile Industry (Part II) 1502
SAMPE. Materials--Pathway to Future 4301
SAWTRI's Research on Wool and Wool Blends [1952-1987] 3238
Strength And Elongation Testing of Single And Ply Yarns. Experience With Uster Tensile Testing Installations 1451
Study of Information -- Interdisciplinary Messages 7973
Textiles -- Product Design and Marketing 1583
The Mechanics of Wool Structures 3208
Third International Conference on Geotextiles, proceedings 7965
United Kingdom Directory of Fibers, Filaments, and Yarns 1584
Zero Quality Control -- Source Inspection and the Poka-Yoke System 7871

BORON FIBERS, SEE INORGANIC FIBERS.

BRAIDING (SEE ALSO OTHER HEADINGS, SUCH AS CORDAGE AND ROPE)
3-D braided commingled carbon fiber/PEEK composites 4302
braiding techniques, 3-D, for composite preforms 4267
composite cylinders, mechanical properties studied using lateral compressive tests 3520
composite tubes. bending behavior with braided construction 6746
composites. resin transfer molding combined with dry fiber braiding 5093
industrial textile design linked by computer to manufacturing 1045
preforms for composites. comparison of processes, structures and tensile properties 6717
resin impregnation system developed to adapt braiding to automated production of advanced composites 7463
sandwich panel constructed from thin walled braided tubes. lightweight, high performance 6719
Soshun Biko. early nineteenth century treatise documenting hand held loop manipulation braiding techniques 1403
three dimensional braided composite preforms. post-impact damage performance 4342
two step braided composite system 4343
weaving. triaxial technique by fiber artist David Mooney 8326 8327

BRAIDING MACHINERY
acrylic/viscose Siro spun yarns. effects of staple length, fiber denier, and strand spacing on properties 6600
harness braiding machines for British Aerospace 1794
Spanish machinery review. crochet, trimmings, raising, dyeing, printing, medical textiles 1536

BRIGHTENING, SEE BLEACHING, OPTICAL BRIGHTENING.

BRI-NOVA IS A NYLON 66 FIBER.

BRI-NYLON IS A NYLON 66 FIBER.

BRUSHES

BUILDINGS, SEE MILL BUILDINGS.

BULANA IS AN ACRYLIC FIBER.

BULK YARNS, SEE TEXTURED YARNS.

BURNING, SEE FLAMMABILITY.

BUTTONS, SEE FASTENERS AND TRIMMINGS.

BUYERS' GUIDES, SEE DIRECTORIES.

BYSSINOSIS, SEE DUST, ENVIRONMENT, INDUSTRIAL HEALTH AND SAFETY, LEGISLATION.

CALENDERING (SEE ALSO OTHER HEADINGS, SUCH AS EMBOSSING)
bonding, calender. Meraklon fibers from Terni 5091
bonding, resin pattern. soft nonwovens 5984
Meraklon fibers from Himont Italia. fiber structure and properties. suitability for calender bonding 3289
nylon fabric. Ramisch Kleinewefers NIPCO calenders 490
optimal calendering process for polyvinyl chloride artificial leather. Ridge analysis 4500
overview of calenders' contributions to finishing processes 7654
polyvinyl chloride fabrics, calendering tests, production environment 5316
process control systems from Ramisch Kleinewefers 3668
self-regulating card feed and adjustable calenders for thermobonded nonwoven production 3501
thermobonding improved through calender pressure and temperature control 1812
woven fabric, mechanical properties. changes caused by calendering 489

CALENDERS
automated process control system. Ramisch Kleinewefers 7655
B. F. Perkins. product specifications for various units 1525
compressive shrinkage systems, fabric embossing, calendering system for fabric finishing 6959
corduroy, mill executives discuss [1988] market 2651
ITMA [1987]. knitgoods finishing machinery 6093
mechanical finishing machinery at ITMA [1987]. consolidation and control instead of innovation 3673
nonwoven web manufacture. calender roll function from Ramisch Kleinewefers explained 3503
overview of calenders' contributions to finishing processes 7654
Perkins Lab Calender, advantages, applications 3669
process control system from Ramisch Kleinewefers for calenders with Nipco rolls 7651
Ramisch Kleinewefers NIPCO calenders, abilities, examples using nylon fabric 490
Ramisch Kleinewefers. Nipco calenders 5317
Roberto roll from David Bentley Limited. product composition, cost, application 6946
self-regulating card feed and adjustable calenders for thermobonded nonwoven production 3501
thermal bonding equipment for nonwovens from a variety of international companies 3504

CAMBRELLE IS A NYLON FIBER.

CANTRECE IS A NYLON FIBER.

CANVAS, SEE FABRIC PRODUCTS.

CAPROLAN IS A NYLON FIBER.

CARBON FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS COMPOSITES AND INORGANIC FIBERS)
3-D braided commingled carbon fiber/PEEK composites 4302
acetone vapor sorption by carbon fiber sorbents 7303
activated carbon fibers. microstructure 7304
advances in carbon fiber technology and products 5654
Aerolor. carbon/carbon composites from Le Carbone-Lorraine (Trade Lit.) 7484 7485 7486 7487
aerospace market in United States attracts polyacrylonitrile producers 5655
aging effects on mechanical properties of epoxy composites 4314
APC-2 cross-ply laminates. residual stresses 6044

AS4 Graphite and E-Glass fibers in polyphenylene sulfide matrix 982
AS4/3501-6 carbon/epoxy laminates. failure 7845
bismaleimide woven fabric prepregs. United States Army 4315
brominated carbon fibers produced via intercalation process. electrical properties 8024
Carboflex from Ashland Petroleum. manufacture and properties 2452
carbon fiber adsorbents. cleanup of gas discharges from acetone vapor 8846
carbon fiber composites containing delaminations. load duration and fatigue behavior 6300
carbon fiber reinforced composite laminates with PEKK matrix. properties 6546
carbon fiber reinforced composites. fracture characteristics 7491
carbon fiber reinforced plastics. increased damping by short fibers or matrix with high dissipation 5969
carbon fiber reinforced polyether ether ketone laminates. temperature distribution and thermal cycling 7470
carbon fiber reinforced polyfurfuryl alcohol composites pyrolyzed to carbon/carbon composites. properties 6003
carbon fiber yarns from Schappe. protective fabric applications 2544
carbon fiber/tetrafunctional epoxy resin composite. modified with liquid carboxyl terminated nitrile 2633
carbon/epoxy composites. testing for strength and lifetime 7821
changes in polyacrylonitrile-based carbon fibers' conductive resistance after oxidation, carbonizing 4047
chemical vapor deposition of boron and silicon carbide on tungsten or carbon core 5656
composites with PEEK. effects on crystallization 8363
composites, carbon/carbon. testing single fiber bundles for axial tension to failure 658
composites. carbon fibers sandwiched between two polyamide nonwoven webs 4268
continuous polyether ether ketone/carbon fiber reinforced thermoplastic composites. flow processes 4317
corrosion of carbon fiber reinforced aluminum composites 3854
cracked carbon fiber composites. Mode III tearing test methods 7820
crosslinking under microwaves of composites with an epoxy matrix and short carbon fibers 7305
crosslinking. anhydride-cured epoxy resin at carbon and graphite surface 1826
dimensionally critical structures for spacecraft and electronics packaging 7306
double-layered carbon-phenolic/carbon-epoxy filament wound structure 7471
elastic fields adjacent to graphite fibers in epoxy resin composites. polarizing microscopy 7495
elliptic rings of carbon fiber reinforced thermoplastics. spring constants 4319
end notched flexure used to study interlaminar fracture of graphite composites 6303
extrusion of nematic liquid crystalline fiber. highly oriented fiber without drawing 6510
Fiberite T300/934 graphite/epoxy plates. matrix cracking and delamination caused by impact 7489
fibers and composites modified by induced anodic oxidation 7481
fire resistant materials from Great Britain. carbon fiber material, glass fiber fabrics, ceramic fiber blankets 2459
flame retardant applications 762
formation from polyacrylonitrile precursors. elemental, property changes 8025
fracture surface analysis of carbon fiber reinforced polyether ether ketone composites 767
fretting fatigue of carbon fiber reinforced plastic laminates 871
Georgia Tech research on fiber formation. high performance carbon and ceramic fibers 4046
Graflok. unidirectional carbon fiber reinforcement composite from Heinsco Limited 1147
Graflok. unwinding creel from Texkimp 5834
graphite and carbon textiles from Le Carbone-Lorraine (Trade Lit.) 7482
graphite fabric T-300 impregnated with Skybond 703 resin. chemical behavior during cure 1144
graphite fiber composites. fiber surface chemistry. shear strength and thermo-oxidative stability 4324
graphite fluoride fibers in composite fiber structures. high thermal conductivity material 7498
graphite reinforced composites. laser curing 1048
graphite/epoxy composite. thermal damage effects on delamination toughness 7497
heart valves made of pyrolytic carbon reinforced with fibers to deflect fractures 5444
heat and fire resistant barriers, carbon fiber applications 1656
high performance polymer matrix composites. deterioration in aerospace environments 7500
high performance textile types of fabrics and various fibers from Carr Reinforcements in United Kingdom 1646
hybrid graphite/epoxy laminates. thermal cycling effects on dimensional stability 4370
impact resistance of carbon fiber reinforced epoxy and polyether ether ketone composites 6305
impregnation, ultrasonic. glass and carbon filaments 5810
interface with epoxy resin matrix. shear strength of composite 4265
interfaces in carbon fiber/aluminum composites 6743
itaconic acid used as comonomer in acrylic fiber. carbon fiber precursor 8081
laminates of carbon fiber/PEEK. development of impact damage 3512
laminates, carbon fiber reinforced polyimides. notch sensitivity, fatigue loading 268
Lenzing viscose fibers incorporating carbon 3315
Lenzing's viscose rayon fibers with carbon, Viscostat and Viscocarbon 3314
low velocity impact testing graphite fiber composites 6306
manufacture. quality control standards from Toray 8822
manufacture. structure. properties. role in composites 3253
Mayer's ZM(Z)G warping system for high tenacity yarns 989
multi-angle carbon fiber/polyetherether ketone laminates. fatigue testing 8736
Nicalon from Nippon Carbon Company. aluminum-nickel alloy with silicon-carbide fibers. properties, applications 4266
Nippon Oil produces petroleum pitch-based continuous carbon fiber. technology, applications 5653
nondestructive testing of carbon fiber reinforced composites used in airplanes 6307
nonwovens applications. growth outside military and aerospace markets 4282
notched carbon fiber composites. effect of environment on fatigue loading 7503
oxidative pretreatments. effects on fiber surfaces studied with Thermal Desorption Mass Spectrometry 7921
oxygen atom interaction with materials. materials exposed to low Earth orbit space environment 7359
petroleum based and coal based pitch to develop carbon fibers in Yugoslavia 7307
plasma treatment for surface energetics analysis 8026
polyacrylonitrile carbon fiber sales increases. Toray Industries, Mitsubishi Rayon, Toho Rayon, increased demand expected 872
polyamide-imide and polyphenylene sulfide reinforced with short carbon fiber. wear rates and friction mechanisms 6543
polyethylene and carbon fiber hybrid laminates. properties 1145
polyethylene melts filled with metal or carbon fibers. rheological properties under steady shear flow 5687
produced fron polyacrylonitrile and mesophase pitch precursors (Conf. Paper) 8035
protective clothing, welding mats produced with sheet laminates and other fibers 4833
reconstituted carbon fiber reinforced polyether ether ketone composites. tensile and flexural properties 6309
reinforced composites 8364
reinforced epoxy composites. examination of fiber/matrix interfacial

properties 8368
reinforced epoxy composites. inverse gas chromatographic study of fiber surface energies 8367
reinforced plastic laminates. chemical resistance 5109
reinforced surgical implants. Medicarb from Dunlop Medical Products 7746
residual strain in carbon fibers/polyether ether ketone composites. Raman frequencies 6310
residual strength of carbon/epoxy composite subjected to repeated impact 7504
resin matrix interphase. effect of carbon fiber on composite performance surface treatment 4313
shear failure in carbon fiber reinforced polyetherether ketone 3814
shear testing of neat thermoplastic resins and their unidirectional graphite composites 689
silicon and carbon fibers. nuclear magnetic resonance 4655
stepwise heat treatment stabilization process using Courtelle as carbon fiber precursor 873
structure, properties, applications. fibers and composites 1647
suitability of polyacrylonitrile as precursor material 8017
Sumitomo Chemical Company and Hercules to produce polyacrylonitrile [after 1990]. agreement details 4062
surface composition treated fibers studied by X-ray photoelectron spectroscopy 874
T-300 carbon fiber surface modification to enhance bonding. determination of chemical nature of treated fiber surfaces 7480
Teijin's coal pitch-source carbon fiber 7302
thermo-oxidative stability of Celion 6000 graphite fiber, PMR-15 matrix resin, Celion 6000/PMR-15 composites 8357
thermo-oxidative stabilization of polyacrylonitrile precursor during formation 8015
thermoplastic filament winding. heat transfer, heat flow phenomena 5111
thermoplastic matrix interface research at NASA-Langley (Conf. Paper) 8678
thermoplastic matrix of polyether ketone ketone in carbon fiber reinforced composites. evaluation 7508
thermoplastics with tack. fabric production methods 5987
Toho develops polyacrylonitrile based carbon fiber with highest elastic modulus in tension 1645
Tokai Carbon produces silicon carbide whiskers to reinforce ceramics 6506
Torayca carbon stitching thread for z-directional laminates 4101
torsional buckling load of graphite/epoxy shafts 6314
ultrafine high performance yarns. carbon fiber. Heltra process 4073
vapor-phase-grown carbon fiber. production. characteristics 8027
variation of local compliance in cracked graphite fiber reinforced polyimide composite specimen 7510
Viscostat and Viscarbon. industrial textiles 6555
warping high tenacity yarns. Mayer's ZM(Z)G warping system 5852

CARBONIZING
changes in polyacrylonitrile-based carbon fibers' conductive resistance after oxidation, carbonizing 4047
Czechoslovakian tests and methods on foam finishing. coating, carbonization, waterproofing 4394
lambswool with high vegetable matter content. extends range of grades acceptable for woolen system 7364
polyacrylonitrile precursors into carbon fibers. elemental, property changes 8025
raw wool and mohair. mild carbonizing studies 1190
solvent scouring/aqueous carbonizing machine tested by Bianchi in Italy 6828
suitability of polyacrylonitrile as precursor material 8017
thermo-oxidative stabilization of polyacrylonitrile precursor during formation 8015
viscose precursor fibers. sulfuric acid/urea pretreatment 8028
wool fabric at increased temperatures, effects on fabric 396
wool. new Sperotto Rimar solvent/water carbonizing range 7569
wool. test to determine damage based on ninhydrin reaction 397

CARCINOGENS (SEE ALSO OTHER HEADINGS, SUCH AS ASBESTOS, ENVIRONMENT, HEALTHCARE AND MEDICAL TEXTILES, LEGISLATION)
azo dyes and dye intermediates. design of non-mutagenic dyes 7906
azo dyes. EPA testing of C.I. Disperse Blue 79. biological wastewater treatment systems 7907
ceramic fibers. potential hazards, toxic effects 7309
Disperse Blue 79 degradation in the waste activated sludge process 7905
dye wastes entering landfill via sludge from biological treatment plants 7911
dyes, non-mutagenic. replacing benzidine residue with non-carcinogenic agents 448
dyes, non-mutagenic. replacing carcinogenic dye intermediates with safe chemicals 447
formaldehyde, OSHA standard. industry reaction to cancer warning labels on fabrics and apparel 3955
lung cancer. inhibition by aerosolized cotton dust 8847
possible anticarcinogenic properties of cotton and wood dust 8902
reduction of disperse azo dyes in bottom sediments in the environment. potential hazards 7914
sorption isotherms. azo dye fate predictors in activated sludge wastewater treatment process 7915
Tris-BP reported as a potential hazard. dermatological effects of treated fabrics. cellulosic fabrics 6941
warning labels on products. California law fuels formaldehyde controversy 6234

CARDING (SEE ALSO OTHER HEADINGS, SUCH AS COMBING, NEPS, SLIVER, UNIFORMITY)
autolevelling effect of card, study 2500
clothing, card. development of high production 4078
composites, carded glass. design, structure, and properties 5959
controlling sliver mean linear density improves spinning 7365
cotton card. mixing action. evenness action. relationship 112
cotton processing. higher cylinder speeds and new mote knife 7366
cotton sweater slowdown at retail affects orders for carded yarns 1305
cotton. influence of feed plate on carding efficiency, yarn qualities 8156
cotton. suggestions for alleviating cotton stickiness problems in processing 8154
Crosrol card conversions. cotton carding 5732
CSIRO carding trials. thickness of fiber layer of swift 4077
efficiency measured with two scientific methods 4901
feed variation in high production carding controlled by Haigh-Chadwick system 8147
feeding system for short staple spinning. Aerofeed U system 5727
fixed carding segments. influence on spinning and process 5730
Haigh-Chadwick. Microweigh hopper eliminates slubbing in high production woolen carding 4906
Lenzing 1.0-dtex Modal viscose and carding, spinning behavior 3325
physical properties of polypropylene. effects on economical tow and staple processing 3291
polyester/cotton yarn. differences in blending before carding and before draw framing 8146
preparation for small wool lots to achieve uniformity 4828
pressure roller, improved battings with roller lubrication, humidity 4902
R6 cotton on Falubaz's CZ 693 flat carder. machinery modifications 120
self-regulating card feed and adjustable calenders for thermobonded nonwoven production 3501
sensor device for carder's bunker to control fiber levels and output 113
sliver density control for uniformity, formulas for feeder and output relationship 114
sliver thickness monitoring by ultrasonic method 4661
sliver uniformity optimized through machine modifications 3329
speed of carding process and relation to fiber breakage. results for

wool, viscose fibers 6561
Truetzschler's cards-information system for monitoring Model DK 740 cards 3328
Uster Sliverdata from Zellweger Uster. continuous monitoring 4926
web forming. carding, air lay, and centrifugal dynamic processes 5982
wool processing steps. shearing to finishing 7402
wool. CSIRO symposium. papers presented on carding from aspect of combing 7367
woolen carding machinery. analysis of evening via computer simulation 7368
worsted card. fiber loading on the main cylinder. effect of top length and noilage 116
worsted carding developments 933
worsted cards. increased productivity and quality. fiber density at the swift 115
yarn evenness in woolen system processing 5731

CARDING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS AUTOMATION, COMBING MACHINERY, SLIVER)
Aerofeed U. developments. history from [1962] to present 3401
autolevelling effect of card, study 2500
card comber cylinder and fly comb. reduction of inertia action in control of fly comb 6565
ChMD-5 high speed. cotton yarn. sliver quality, preparation for rotor spinning 117
control of air flow, feeder to ensure cotton quality, even flow 4081
cotton card. mixing action. evenness action. relationship 112
cotton carder. cap distortion and card cloth movement, correction of deviation 119
cotton processing. higher cylinder speeds and now mote knife 7366
Crosrol card conversions. cotton carding 5732
Crosrol Hergeth. spinning preparation machinery 5742
CZ-693-3a cotton carder, performance tests, recommended design changes 4903
dead end chute feeding, more uniform cotton sliver, parameters 4082
defective machine parts, detection. controlling U% and improving card sliver quality 3332
design. poor quality yarn a direct result of obsolete carding machinery designs 2420
drive gear for carder cylinder, design, control 4083
efficiency measured with two scientific methods 4901
Falubaz CZ 693 modified to process low grade R6 cotton 4904
feed variation in high production carding controlled by Haigh-Chadwick system 8147
feeding system for short staple spinning. Aerofeed U system 5727
Fehrer K-21 Random Carding Machine for light web production. process, fiber application 6562
Fehrer Type K21 random card for nonwovens applications in medical textiles and disposables 5733
Fehrer VF/V21R/K21 high capacity nonwovens line. sanitary and medical applications 8336
Fehrer's K-21 Random Card for nonwovens, maximum fiber throughput, optimum web uniformity 1517
flat carder, CZ 693 from Falubaz, modifications to clean R6 cotton 120
flat carder, Falubaz CZ-693, produces no-web sliver. evaluation of performance 121
Graf Primatop and Primasharp carders 4905
Haigh-Chadwick Ambassador 3000 carding machine at Douglas Reyburn and Co. 6563
Haigh-Chadwick Microweigh hopper. automatically weighs fiber prior to carding 5734
Haigh-Chadwick. Microweigh hopper eliminates slubbing in high production woolen carding 4906
ITMA [1987]. automation in spinning processes 4099
ITMA [1987]. cotton spinning highlights 942
ITMA [1987]. nonwovens. equipment exhibited 1152
Ivchesmach's ChM-50 carder, tests on cotton sliver, yarns 4079
K-21 random card from Fehrer 8338
K-21 Random Carding Machine from Fehrer 1807
loaded arm system for card delivery by Haigh-Chadwick 930
machine specifications for eight cards 8149
metallic card clothing. abrasion resistance 2502
Microweigh automatic hopper for woolen carding 2501
Model Magnum M3 woolen yarn cards from William Tatham 3330
Nowo Card K. Noworoll. handles wide range of fibers 8148
Primasharp cylinder and Primatop flats clothing from Graf 3331
random web card. K21 from Fehrer 8331
revolving flat cards. Mini workshop for in-works maintenance 8165
roller card with intermediate combing stage from Giovanni Bacchio. advantages 122
rollers and roller coatings for the textile industry 4752
RSK-Sh worsted system carder, abilities, sliver properties 4080
saw-tooth wire treatment. wet spraying and chemical deburring 8150
short staple spinning. [1987] ITMA 1693
sliver count, new apparatus to control material fed into carding machine to produce a signal 931
sliver uniformity optimized through machine modifications 3329
South Carolina mills installing improved preyarn processing machinery 2508
speed of carding process and relation to fiber breakage. results for wool, viscose fibers 6561
Thibeau B34PP carder for polyester yarn produced from sliver 118
Unirea 4S carder, high speed, adjusted for improved sliver 4907
woolen carding machinery. analysis of evening via computer simulation 7368
yarn evenness in woolen system processing 5731

CARPET BACKINGS AND BACKCOATINGS
bonded carpets resurgence. economic advantages 5092
commercial application label program, Carpet Cushion Council. choosing types for commercial installation 5432
conductive acrylic fibers for antistatic carpets in computer rooms 5643
conductive carpet to dissipate static electricity, protect computers and other electrical equipment 7034
Contifi and Stoddard Holdings 7462
developments from various major manufacturers 631
Forbo and Fleissner develop continuous range for dyeing 8467
Freudenberg's Lutradur spunbonded polyester laminated by Xiro process 1412
Heimtextil [1988]. carpet trends 6248
Karl Mayer RS 3 MSU-N magazine weft raschel machine used by Amoco fabrics to make customized carpet backing 8302
latex-backed carpets. drying and curing 1417
Lintafoam's polyurethane backings 5431
monitoring, control systems for finishing. automatic straighteners 4388
Monsanto's fluorochemical treatments for carpet yarns and backings 630
Notio Maskiner's modular carpet backing unrolling system 2300
polyurethane carpet backing systems, the Enhancer Plus and Eze-Release. systems features and installation 2156
products from European carpet backing manufacturers trying to capture larger market share 3481
singeing. tufted carpet backings with Ernest Turner's Parex burners 8466
surface fiber removal from Parex singeing burners 7573
synthetic carpet backings in good market position due to resin and styrene monomer shortages 3482
Synthetic Industries' new polypropylene staple for carpet backings. marketing 2478
TIFCON [1987] conference report. developments in carpet technology 1424
WestPoint Pepperell's Masterwear carpet cushion. composition, properties, promotional campaign 6247
woven polyester and nonwovens from polypropylene and polyester polyamide, developments in carpet backings 2000

CARPET INDUSTRY (SEE ALSO OTHER HEADINGS, SUCH AS

TEXTILE MILLS, TEXTILE TRADE, WEAVING INDUSTRY)
American Carpet Mills formed 7029
American Flooring Association's [1987] Retail Report 1413
Amoco PermaColor stain and fade warranty 7030
Amoco's Genesis carpets for residential market. properties, performance 7752
area rug market in West Germany. market statistics and carpet product innovations 3797
area rugs. mass merchants, new fashion awareness 2168
Atlanta Winter carpet market. dealer enthusiasms, prominent design and style trends 2157
automated process from Fleissner. finishing line for printed tile and computer controlled dye liquor applicator 4389
bank lending program for carpet operations. methods of lending and other elements 635
bar coding. special application of area rug inventory 3792
Bigelow's Jewel of the East area rug collection 2158
Canadian carpet market assessed after stock market crash. Du Pont Canada 3000
Carpet and Rug Industry [1989] Buyers' Guide. suppliers, service organization to carpet industry 8658
Carpet and Rug Institute's industry-wide shipping label, uniform access system to computer network 7037
carpet protection, commercial and domestic 8541
carpet sales and direct mill sales to retailers. market changes affecting floor covering industry 3020
Chicago carpet market 2159
computerization. lack of impact on production plants. discussion with twenty-five top manufacturers 2173
consumer description, income, needs, preferences 644
contract carpets. computer aided design and computer driven tufting machinery 3798
CRI industry-wide shipping label system. computer access to retailers and distributors 5433
de-watering carpets, Kuesters variable slot suction tube 3670
Dextralog FS200 data collection and information system for tufting machines 1072
Du Pont executive examines past and future styling changes in carpet industry. commercial carpet market 2160
Du Pont's Canada Carpet Fibers Group, profile [1988] carpet market and major fibers 5434
dyeing machine, Futura 3000, from Gaston County for large batches and Quick Response quality 5235
fiber consumption up in United States, per capita [1987] figures 5601
fiber producers' new high tech fibers and promotional activities boosting European carpet sales 4641
Floor Covering Weekly's quarterly survey of retailers. market events 632
General Service Administration work to resolve contract problems with carpet industry 2253
German carpet consumption, production, imports, future prospects 2161
guidelines for cleaning stain resist carpets outlined by Association of Specialists in Cleaning and Restoration 6251
hardware and software for the carpet manufacturer and designer 7038
Heimtextil [1988]. carpet trends 6248
Helios division of Horizon Industries, successful high end wool carpet producer and marketer. strategies and production process 4510
Hollytex Carpet Mills profile. automating the tufting process 2162
India. hand knotted woolen carpet industry 2002 2815
Indian exports of hand knotted woolen carpets 7031
Indian hand knotted carpet industry, export and competitive markets. state of domestic industry 633
Indian hand knotted carpet industry. rebuttal against child labor abuse allegations 634
ink jet dyeing systems for the carpet industry. Milliken, Burlington, Stork Brabant, Johannes Zimmer machinery 5242
Intercarpet, future solutions to static electricity reduction 8555
Ireland. future prospects. optimistic outlook. potential problems 7858
ITMA [1987] carpet manufacturing machinery from various European companies. innovations in automated process control 2001
ITMA [1987] trends. automation, jacquards, tufting, labeling 5862
ITMA [1987] trends. carpet dyeing, printing, and finishing 6096
ITMA [1987]. carpet machinery trends 6249
major developments in carpet manufacturing machinery, ITMA [1987]. review 1728
manufacturers, second top twenty-five. United States 5435
manufacturers, top twenty-five. United States 5436
manufacturing costs and pricing structure in the tufted carpet industry 2163
Milliken's Every Inch Guarantee 7753
Modern Floor Covering's sixtieth anniversary. publishing history. carpet trends 3001
Monsanto's locked-in stain resistance with bulked continuous filament fibers, Wear-Dated carpets 7754
Monterey Carpets under new ownership. management restructuring, goals 7032
nylon. recent modifications. Antron Stainmaster. Du Pont's expansion plans 7340
oriental rugs. training program for retailers 3793
Polypropylene Textile and Fibers conference highlights 2477
printing, carpet tile. M 5970 jet printer. ETF 6097
product offerings, styles, trends at [1988] Winter Carpet Markets 2164
products and services to carpet and rug industry. annual Carpet Exposition in Print 3003
retailers. guidelines for moving from the residential to commercial carpet business 3794
S Rug Company. acrylic rugs and low end markets 3002
sales increases expected at 2.1 percent annually 7755
sales. Allied Fibers' Retail Information Panel report, stain resistant carpets best sellers. other industry trends 5437
shape of the European textile floor covering markets 2165
steam finishing unit for carpet fibers, Fabri-Zone. unit features and price 4505
synthetic turf directory of manufacturers of indoor/outdoor carpet 2166
TIFCON [1987] conference report. developments in carpet technology 1424
Top Thirty Carpet Companies [1987], study on residential carpet industry top performers, statistics 6170
United Kingdom. market predictions for next decade 8659
United Kingdom. woven and nonwoven 2816
United States 7117
West German carpet industry. imports overtake exports for [1987] first quarter 4781
West German floorcovering industry. decline in volume for floorcoverings for new buildings 4780
West German floorcovering industry. unexpected four percent drop in production for [1987] first quarter 4782
Western Anatolia [1750-1914]. overview of carpet makers 1414
winder, automatic air entanglement for multifilament yarns from Belmont. money saving 3425
Winter Market [1987] at Western Merchandise Mart. dominant carpet trends include color, patterning, handcarving, elegance 1415
World Carpets. corporate development, present operations, products, expansion plans 1416

CARPET LOOMS (SEE ALSO OTHER HEADINGS, SUCH AS TUFTING MACHINERY)
arrangement of jacquards for weaving carpet designs with two ground colors 6644
ITMA [1987] developments reviewed. microprocessors and electronic control systems 1001
ITMA [1987]. carpet machinery trends 6249
looms. shed control mechanism created by determining the beat-up force 225
Model MTDJ-EN rapier loom from Mertens and Forwein 6643

ST range from Cobble Blackburn. programmable sliding needle bar drive for patterning carpets 5103

CARPET YARNS
Alguard RD stain repellent finish for nylon carpet fiber 7649
Barmag. spin-drawing, texturing, and winding machinery 5666
BCF. Eltex TA tangling machine 5799
Bibb Yarns. GC-12 Chain Gill drawing machine from Schlumberger. reduced costs, increased product quality 2503
Burlington's Lees/Link, direct access computer system for retailers 7036
carpet industry. improved market due to recent advances in nylon. Du Pont 7340
Chemset. chemical finishing 6940
Ciba-Geigy's Cibatex 4458 photodegradation inhibitor for polyamide carpet fibers 3606
color application. problems with fourth and fifth generation polyamide fibers 403
Confederation of British Wool Textiles. production statistics for wool, manmade, and blended yarns 1716
Dorsett Carpet Mills. carpets made with own solution dyed nylon products 2453
Du Pont's Canada Carpet Fibers Group, profile [1988] carpet market and major fibers 5434
dyeing, jet. Futura 3000 machine for polyester or nylon 5235
Enka Polyamide 1000 SR with Scotchgard Stain Release 7390
exhibition, Harrogate International Carpet [1987] profiled 5439
fiber tip configurations of finished yarns, relationship to luster 168
heat set nylon 6. tension effects. thermomechanical analysis 966
Hercules' 2500 denier Herculon polypropylene fiber for residential carpets 3007
Hoechst introduces new Trevira and Dolan carpet yarns 3795
intermingled fiber yarns, air entangled process from Texture-Tex 8191
ITMA [1987]. carpet machinery trends 6250
manmade fiber yarns, development tendencies 4970
manufacturers, United States, having good year. [1987] shipments described 4139
Marvess olefin, five new designer colors introduced by Phillips for commercial carpets 3004
Monsanto's fluorochemical treatments for carpet yarns and backings 630
Monsanto's locked-in stain resistance with bulked continuous filament fibers, Wear-Dated carpets 7754
near-infrared determination of nylon carpet yarn heat setting method 7067
New Zealand and Indian wools, compared 7986
Nitril-Static carpet fibers, reduce static electricity, test results 4037
nylon and polyester, stuffer box and texturing methods 164
nylon fibers containing cupric acetate with potassium salt imparts antimicrobial activity 4863
nylon fibers, twenty denier staple. Allied Fibers 4862
Nylosan Blue C-BGL and Nylosan Blue E-BGL acid dyes from Sandoz for polyamide fibers 5261
pile carpet fibers. market position and performance characteristics 1602
pile carpet fibers. structure and properties. developments 1627
polypropylene and polyethylene carpet yarns, blending properties 169
polypropylene BCF. continuous spin-draw-texturing 5807
polypropylene filament yarns. worldwide production and trends 4868
polypropylene or polypropylene bulk continuous filament cabling and two-for-one on VTS-05 spindle from Volkmann 8196
polypropylene, increased use in carpets. care instructions, properties 7025
producers, fibers [1988] directory. companies, addresses, products, markets 4071
properties, features, performance, applications of polypropylene 1677
Rhone Poulenc, fiber manufacturing operation profiled 1475
robotics for carpet yarn spinning seen at ITMA [1987] in Paris 2514
selection criteria for carpet pile. polyamide bulked continuous filament 1418
setting unit, HBS-T. Hirschburger 5803
singles and two fold woolen yarns. twist effect on rub felting process 1259
solution dyed yarns and rise in popularity 6533
solution or producer dyed yarns for carpet pile. polyamide bulked continuous filament yarn 2780
solution-dyed, nylon Deltron-S from Golco Industries 4971
staple nylon fiber, 20-denier carpet yarns from Allied Fibers. applications 5438
staple nylon fibers, twenty denier for commercial carpet application. from Allied Fibers. PerfectLuster, TraditionalLuster 4038
stuffer jet crimper for bulked continuous filament carpet yarn 6609
Suessen heat setting conditions. influence on thermal stress analysis measurement of carpet yarns 964
Trevira polyester gaining in residential carpet market, stain resistant quality, promotions 6252
wear, stain resistance. Stainmaster program by Du Pont 1419
West German carpet manufacturers use Du Pont Antron Stainmaster 3796
wool and wool/nylon yarns, use in tufted carpet due to WRONZ's Chemset process 5812
Wunda Weve's Battery Park solution dyed olefin to be installed in Ramada Inn 3005

CARPETS (SEE ALSO OTHER HEADINGS, SUCH AS AUTOMOTIVE FABRICS, HEALTHCARE AND MEDICAL TEXTILES, HOME FURNISHINGS, NEEDLED FABRICS, TUFTED CARPETS, WEAVING)
Alcosist AFA antifrosting agent. continuous dyeing or printing of nylon carpets with anionic dyes 7581
Alguard RD stain repellent finish for nylon carpet fiber 7649
American Carpet Mills. Embassy, Rock Point 20/26, Tiffany, Starry Night styles 636
antistatic spray, Neostatic 12 from Grote 6245
area rug market in West Germany. market statistics and carpet product innovations 3797
area rugs, Atlanta [January 1988] floor coverings market 2185
area rugs, [1988] market. trends toward green 2186
area rugs. mass merchants, new fashion awareness 2168
Atlanta Winter carpet market. dealer enthusiasms, prominent design and style trends 2157
Bigelow's Jewel of the East area rug collection 2158
bonded coming back in style. Titan II machine from Contin fi and various advantages of bonded carpets 5092
carpet floor covering care and cleaning methods standards 2169
Chicago carpet market 2159
cleaning stain resistant carpets, Certified Technicians and points to follow 5441
coating with BSK-70/2 latex 5325
color graphics computer, software for carpet design 7033
Columbus Mills forms contract carpet division called Lotus Carpets 8660
computerized systems for carpet mill. BGD Computer Systems 7881
conductive carpet to dissipate static electricity, protect computers and other electrical equipment 7034
custom of rental mats at Georgia State University. Aratex Services and Kleen-Tex to control dirt and enhance client's image 4640
cutting. Aqua Jet water jet that cuts through Kevlar 6187
damage. analytical techniques and instrumentation used to study 675
de-watering carpets, Kuesters variable slot suction tube 3670
Design-Scope pattern preparation station by EAT for dobby and jacquard weaving, jacquard warp knitting 4984
design. CAD system for ICN from Wharncliffe 5008
design. Pattern Management System. Vertical Technologies 5865
design. Vertical Technologies' Pattern Management System 2614
dhurrie market [1987]. retailers describe sales and products in record year 640

Dorsett Carpet Mills, trio of graphic patterns for heavy commercial traffic areas. Celestial, Futura, New Dimensions 638
Dorsett Carpet Mills. carpets made with own solution dyed nylon products 2453
double plush carpets from reusable textile materials. reducing raw material consumption 2170
dye uniformity improved by use of Superba heat setting apparatus 497
dyeing. Kuesters. Flexnip liquor applicator shown at ITMA [1987] 5189
dyeing. Telon Yellow FRL 200. acid dye from Mobay which eliminates unleveiness in carpet dyeing 8516
electrical conductivity in carpets and floor coverings 2171
electrostatic propensity. safety margin 5472
fiber producers' new high tech fibers and promotional activities boosting European carpet sales 4641
fibers. transfer in automobile carpeting. forensic research 3818
finishes, Baygard SF and SF-A from Bayer 6150
floor coverings and health considerations, harboring microorganisms and fungi 2172
floor coverings and minimum fire resistance standards by the German government 2177
floor coverings. British Standards revised 637
Forbo and Fleissner develop continuous range for dyeing and backing 8467
GFI's Firm-Trod commercial rubber carpeting. installation procedures 639
goniophotometry. textural measurement of carpet pile 3839
Harrogate International Carpet Exhibition [1987] profiled 5439
Heimtex [1988]. carpet trends, tufting machines, stain blocking 4514
Heimtextil [1988]. carpet trends 6248
Heimtextil. innovations in machine technology and carpet design 2167
Hercules' 2500 denier Herculon polypropylene fiber for residential carpets 3007
Hoechst introduces new Trevira and Dolan carpet yarns 3795
Horizon shearing machine from Sellers. computer control and monitoring 2629
Hubbell Trading Post. miniature paintings of Navajo rug designs 2996
India. hand knotted woolen carpet industry 2815
installation, two stage glue down process, Butler golf course clubhouse, Sponge Cushion's Tred-More pad, Mohawk axminster 641
ITMA [1987]. carpet machinery trends 6249 6250
ITMA [1987]. general review 1467
Karl Mayer RS 3 MSU-N magazine weft raschel machine used by Amoco fabrics to make customized carpet backing 8302
M 5970 jet carpet tile printer from ETF Maschinenfabriek BV. printer features and operational process 1955
M&S International design. Personal IGOS M&S CAD/CAM System for weaving and printing and carpet manufacture 8231
machinery for coating and printing carpets featured at [1987] ITMA 4392
manmade fiber yarns, development tendencies 4970
Navajo rugs. material sources 1400
Newhey. new designs 5440
nonwoven products manufacture. needle punching, from BTRA 6727
Nylosan Blue C-BGL and Nylosan Blue E-BGL acid dyes from Sandoz for polyamide fibers 5261
Optocator laser triangulation probe for measuring thickness of carpets 3061
patterning pile carpet with a laser beam developed at Interface Flooring, method 1795
pile construction, fiber denier and their relation to carpet durability 6645
pile rug weaving. origins in Middle East and Scandinavia 1406
polyacrylonitrile/nylon, viscose/nylon carpets, shrinktesting 642
printing, carpet tile. M 5970 jet printer. ETF 6097
Regal Rugs expands its production and marketing 3008
residential carpets, prominent [1988] trends 1421
Shaw Industry's consolidated contract carpet division 3009
smoke emission tests, radiant panel. carpets 8705
soiling types on carpets and appropriate cleaning methods 3732
stain and soil resistance for carpet protection. 3M executives describe company's products 7035
Stainmaster carpet from Du Pont. fluorochemical technology. soil release, stain resistance 1420
steps to obtain quality finish on carpeting 5955
Tectilon Yellow 3R dyes carpets made of polyamide 5264
textile research. wear and carpet construction, fiber fineness 6715
tiles, carpet. production and printing 5956
tufted carpet patterns and exact color matching with Skopien computer 643
tufting machinery developments from Card Monroe, Chattanooga Tufters, Cobble Tufting, Nakagawa Seisakusho, and Tuftco 2010
United Kingdom. Carpet Grading Scheme 3006
walking on carpets analyzed, lower limb muscle activity and ground reaction forces 1353
wear properties related to fiber fineness in carpet pile layer construction 5442
West German carpet manufacturers use Du Pont Antron Stainmaster 3796
Wira Technology Group/IWS beater sampler for bacterial content evaluation of carpets 7204

CASHMILON IS AN ACRYLIC FIBER.

CATAMENIAL DEVICES, SEE SANITARY NAPKINS AND TAMPONS.

CELLULASE, SEE ENZYMES.

CELLULOSE (SEE ALSO UNDER HEADINGS OF SPECIFIC FIBERS AND PROCESSES, SUCH AS ACETATE, CELLULOSE FIBERS, DETERIORATION OF MATERIALS, GRAFTING, MICROBIOLOGICAL DEGRADATION, PHOTOCHEMICAL DEGRADATION, TEXTILE NUCLEONICS, VISCOSE)
absorbency and fluid properties in rayon and polypropylene air-laid needle punched fabrics 4373
acetylation with acetic acid 8915
alkali cellulose. alkali distribution. phase transitions in mercerization 8460
alkali cellulose. fractional composition after degradation 37
alkaline deacidifying agents. effects on historic and naturally aged cellulosic textiles 7932
ammonia-mercerized cellulose. improved physical characteristics of cottons 7645
benzoylated cellulose. effects of benzoylation treatment on tensile strength after gamma-ray exposure 8137
C. I. Direct Red 81 staining to observe crosslink distribution 7996
cellophane tape. effect of swelling on structure and mechanical properties 3254
cellulose films. calculating destructive stress at break 7318
cellulose solutions in MMO. thermal stability 3967
cellulose triacetate solutions. solvation 1637
cellulose xanthate. reaction with chromium compounds 7922
cellulose xanthates. structure and properties 3968
computed tomography measures fluid migration in absorbents 4686
cotton and viscose fibers. X-ray orientation profiles. changes due to swelling and stretching treatments 5604
cotton textiles. durable press reactants based on cyclic ureas. solid probe mass spectrometric analyses 7640
derivatives of cellulose and their rheological properties 79
dialysis membranes for hemodialysis. Akzo substitution-modified cellulose membrane 7758
fabric finishing. ASISA Shocksteam continuous open-width processing system 7568
fibrils from immature cell wall of plants studied with X-ray and electron diffraction 4003
finishing of fabrics with N-methylate compound. new studies 6141

formaldehyde release. durable press finishing of cotton fabrics 7639
gamma cellulose content increased in viscose fibers resulted in high reactivity and uniformity 4890
gamma-ray radiation protection to cellulose esterified with benzyl chloride 8138
gelation of carboxyethylcellulose studied by nuclear magnetic resonance 5558
graft polymerization of viscose to cellulose during spinning. anion-exchange properties 99
high molecular sulfite cellulose. ionizing radiation effects 8029
hydrocellulose film. control of plasticizing process 3261
hydrogen bonding on fibrillar surfaces 7929
influence of structure types on strength in fibers and films 4834
linen. effects of heat-induced aging on color, tensile, abrasion, dyeability 7476
liquid ammonia treatment of cotton and cotton blends. breaking ammonia adduct. effect on cellulose structure 6836
liquid-crystalline properties of cellulose esters and silyl ethers 4769
liquid-crystalline properties of selected cellulose derivatives 4770
methyl cellulose combined with crosslinking agent on cotton printcloth for restricting migration during drying 7646
microcrystalline cellulose from water hyacinth found an acceptable adsorbent for thin-layer chromatography 6429
microcrystalline cellulose from water hyacinth. physicochemical properties 6431
microfibrils identified in tobacco leaf cells and Acetobacter xylinum 4004
modified cellulose materials. new method for derivation 7308
polymer-solvent interaction in cellulose-N-methyl morpholine-N-oxide water 55
polyurethane developments. Perlons. cellulose derivatives 7352
production. lithium chloride/urea processing system 4054
rayon and polyester/rayon blends. wet printing 466
saccharification by acid hydrolysis 2454
sizing. substitution of wheat for corn starch in glue 7088
thermal adaptability. polymer coatings on fabrics. changes in cellulose after treatment 7642
vinyl monomer binary mixtures for synthesizing cellulose graft copolymers 7314
wet spinning process for cellulose linters. alkalization of cellulose 3269
wood pulp properties. effect on viscose process and fiber characteristics 3313
xanthogenation. kinetics by reverse method 1648
yield of cotton linters. determination using Shirley Trash Analyzer 3808

CELLULOSE ACETATE, SEE ACETATE.

CELLULOSE FIBERS (SEE ALSO UNDER HEADINGS OF SPECIFIC FIBERS AND PROCESSES, SUCH AS ACETATE, DETERIORATION OF MATERIALS, GRAFTING, MICROBIOLOGICAL DEGRADATION, PHOTOCHEMICAL DEGRADATION, TEXTILE NUCLEONICS)
absorptive and retentive pulp. crosslinking 8044
antiperspirant damage to garments made of cellulose fibers. cause, prevention 2068
Avtex Fibers, rayon fiber products. standard rayon and high wet modulus rayon. end uses 1649
benzoylated cellulose. effects of benzoylation treatment on tensile strength after gamma-ray exposure 8137
Cellca cellulosic fiber from cellulose urea reaction, by Neste 3244
Cellca fiber developed at Technology Center of Neste Oy in Finland. production process, properties 3245
Cellca fibers from Neste. production and properties 4039
cellulose fabrics. deterioration when resins applied to stiff fabrics 7712
cellulose staple fibers. modification gives antimicrobial properties 3257
Conflex C and Conflex V. high conductive cellulose fibers, antistatic element in fabrics 3246
consumption worldwide of cotton, wool, manmade, cellulose fibers since [1960] 4001
cotton and viscose fibers. X-ray orientation profiles. changes due to swelling and stretching treatments 5604
cotton fiber structure and properties. effects of mercerization 6463
cotton industry. critical standards of quality. special applications in rotor spinning 3209
Courtaulds Tencel fiber dyeing characteristics of rayon with twice the strength 5657
drycleaning rayon fabrics 6208
dyeing. fiber pore structure. thermodynamic affinity 4421
fibers extruded from cellulose solutions in methylmorpholine oxide. morphology 8030
fibrets by Celanese. applications and characteristics 876
fibrets from Celanese Industrial Fibers, commercialized production of the cellulose acetate for specialty industrial applications 875
finishing, resin. resin damage, solutions 4575
flameproofing 1963
fluid transport in low density thermally bonded core with bimodal pore size distribution 4625
gamma cellulose content increased in viscose fibers resulted in high reactivity and uniformity 4890
gamma-ray radiation protection to cellulose esterified with benzyl chloride 8138
hollow fibers used for membranes. synthesized from organic solvents 5658
hydrocellulose. structure. spin probe study 8031
hydrophilic dyes from 5,10-dihydropheno phosphazine ring system form covalent linkage to cellulosic fibers 7611
influence of structure types on strength in fibers and films 4834
Lenzing Modal. cellulosic fiber properties and market appeal 2462
Leucophor BMF Liquid. fluorescent brightener for cellulose fibers 5300
microcrystalline cellulose from water hyacinth. physicochemical properties 6431
NCSU research leads to light, strong cellulose fiber. applications, research, production 6430
pad dyeing of cellulose fiber knits. the new Tubocolor by Bruckner 8486
production [1987]. worldwide 4861
ramie. properties and end uses 5618
rayon fiber shipments by United States carpet manufacturers in last year 4139
rayon grafted with acrylic acid. decrystallization studies 4040
reactive dyes best for cellulose fibers in rapid dyeing systems 5268
resin damage to cellulosic fibers. cause and appearance 4565
saponification bath for improved static, dyeability, hand. bath components 4895
spinning from dimethylacetamide with lithium chloride and polyacrylonitrile 4041
swelling behavior of cellulose fibers in liquid media 3255
Tencel from Courtaulds. produced by gel spinning 4835
Tencel, from Courtaulds' Genesis project. gel spinning technique 2455
Tencel. new cellulosic fiber from Courtaulds 5624
thermo-oxidative degradation of cellulosic textiles. ultraviolet and infrared analysis of artificially aged cellophane 7294
Tris-BP reported as a potential hazard. dermatological effects of treated fabrics. cellulosic fabrics 6941
varieties in development. quality control. production by Viscose Europe 4294
viscose fibers, regenerated, and their contribution to comfort of knit fabrics 3256
wet spinning process for cellulose linters. alkalization of cellulose 3269
worldwide production [1987] 5640
yellowing. caused by nitrogen and oxides. problems in storage 6275

CELLULOSE TRIACETATE, SEE ACETATE.

CERAMIC FIBERS, SEE INORGANIC FIBERS.

CHEESES, SEE WINDING, YARN PACKAGES.

CHEMICAL AIDS TO PROCESSING (SEE ALSO OTHER HEADINGS, SUCH AS ANTISTATIC AGENTS, APPLICATORS, DETERGENTS, FRICTION, SIZING AGENTS, SOFTENING AGENTS, TEXTILE CHEMICALS)
additives. market growth forecast in Europe due to increased demand for natural fibers 6809
adhesive chemicals and bases. Adhesives Age Directory 4153
Albegal Plus. auxiliary used with Neolan P dyes for woolen and worsted piece goods 6894
Alcosist AFA antifrosting agent. continuous dyeing or printing of nylon carpets with anionic dyes 7581
alkaline and acidic processes with anthraquinone for flax/polyester 4095
alternatives to sizing. application of ethylene oxide lubricants on sectional warping machine 4995
aminofunctional silicones, diethylene glycol, and cocodiethanolamide improved finish cotton fabrics 473
benzyl alcohol, color change, measurement, reduces washing time 5309
benzyl spirit/etriol, printing intensifier, method 5297
bleaching of wool. technological developments 2723
boron and silicon carbide on tungsten or carbon core. chemical vapor deposition 5656
carriers for dyestuffs in polyester dyeing. carrier mechanisms 5211
cellulase in fabric washing compositions 7717
chemical processing in India 5161
Chemical Week [1989] Buyers' Guide 8926
combed sliver dyeing, treatment with thiocarbamide, increased chromatic absorption 4444
cotton fabric, sodium sulfide, effects on starch 4406
cotton stickiness, suggestions for ending 8154
Courtaulds Actipore fibers. range of uses given by additives 4042
cracks in polyester fiber. chemical action of spin finishes 6556
creaseproofing and shrinkproofing cotton fabrics. new NKK catalyst 484
dictionary of textile chemicals, dyes, and agents. trade names 7247
Dilasoft KLP Liquid concentrate. softener from Sandoz for cellulosic and manmade fibers and their blends 5158
directory of textile chemicals and auxiliaries by company 1207
dyeing, washing wastewater, cobalt level measurement 5555
ethone for cotton, viscose printing, dye enhancement 5285
ethoxylated amphoteric compounds and acid dyes. wool fibers 6902
ethoxylated quaternaries are useful reactive additives for durable press finishing of cottons 6144
Exclusivas range for reducing weight by caustic soda treatment. improves hand, strength, and dyeability 5305
finishing. application with concern for cost effectiveness and quality 3568
G-Mex Textile and Technology exhibition. chemicals, equipment. dyeing, printing, finishing 4743
Helizarin Binder FT. acrylic pigment binder for direct, resist, and discharge printing from BASF 5190
Helizarin White RTN. titanium oxide preparation from BASF 5258
Hydrosoft N3B from Hydrolabs. softening agent 5159
intensifiers. uses in drycleaning process 3736
Leucophor BMF Liquid. fluorescent brightener for cellulose fibers 5300
Luprintol FBT. binder and film former in transfer-paper printing with Bafixen dyes from BASF 5191
manmade fiber development and chemistry, overview 1545
Marvantex RBDS. buffered agent for bleaching and dyeing cotton hosiery 8487
microencapsulation. finishing 5169
modified suint scouring with nonionic surfactant and alkaline builders 8462
non-acidic bleaching with rongalite and Trilon B. less damage to cotton fabrics 4403
oleochemical surfactants and lubricants, use in textile industry 8556
optical brightening. examination of process. structure of agents 6095
oxidants in new desizing processes. other new chemical developments 3569
parameters for glyoxal use instead of formaldehyde, catalysts, processing 4497
PEG aminoalkyloamidoesters of dicarboxylic acids. tensioactive and corrosion retarding properties 2301
phosphate substitutes in the dyehouse 2763
polyethylene glycol maintains swollen state of cotton during sublimation transfer printing 6829
polymeric antimigrants. statistical analysis of cost and performance 8468
printing cotton fabrics with D brand vat dye powder, sodium hydrosulfite intensifier 1242
process to preserve bulk of wool yarns during package dyeing developed at CSIRO 4446
ramie. efficiency of different degumming auxiliaries 8169
Rongalite during washing after printing acetate knit fabrics, effect on colorfastness 5192
Ruco Leveler HUD from Rudolf. anionic leveling agent for dyeing polyamides 5193
Ruco-Blanc OAO. fluorescent whitening agent for acrylic and polyamide blends used in hosiery from Rudolf 5194
Rucogen NZA developed by Rudolf to remove non-fixated hydrolyzed dyes 5160
saponification bath for improved static, dyeability, hand. bath components 4895
silicone aqueous emulsions. determination of silicone content 8742
silicone microemulsion-based softeners from Dow Corning 8552
silicones. chemistry of polysiloxanes 7644
Sirrix CRC Liquid. wetting agent 5177
solvent recovery systems. distillation process. guidelines. problems 6512
spin finishes for cotton. effect on processing performance of weathered fibers 2456
spin finishes. ICI's G-1089 and G-1043 compounds with higher smoke points 8151
spin finishes. polyalkylene glycol 8546
stabilizers used to maintain degree of polymerization in cellulose molecule during cutting 7989
Stone-Eze. chemical process developed by Ecolab to replace stone-washing 7638
styryl and azo dyes for polyester fibers. derivatives 7620
sulfide sliping process. effect of fiber diameter and wet processing 8005
surface active agents, alternatives to alkylphenolethoxylates in textile processing 7198
synthesis of arylaminodiaryl sulfones by the Chapman reaction, diarylamine derivatives. synthesis 881
textile chemicals, dyes, and agents. listing of trade names 7248
textile chemicals. trade names and manufacturers 7240
textile printing, dyeing and finishing chemicals. trade names 6810
trade name listing 7241
treatments to improve setting of wool fabrics 6936
vat dyeing. thiocarbamide dioxide replaced with Rongalit S catalyst in single phase suspension 415
Verolan WNT. promotes application, shading, and leveling of various dyes on wool 5195
viscose yarn. soft paraffin treatment effects 4965
Vitexol D. defoamer from BASF 5196
water-based polyurethane ionic dispersions 8919
wet processing of raw materials, dyeing, preparation, printing, nonwoven fabrics, apparel treatment, industrial fabrics 2718
wet processing. controlling chemical concentration 8454
Zh orange acidic polyamide dye on nylon fabric using ammonium sulfate 4461

CHEMICAL DEGRADATION, SEE DETERIORATION OF MATERIALS.

CHEMICAL MODIFICATION (SEE ALSO OTHER HEADINGS, SUCH AS CROSSLINKING, GRAFTING)

acetylation of cellulose with acetic acid 8915
acidification treatment after sulfur dyeing, improved color, fastness 5210
amine and alkali-treated polyester fibers. hydrophilic properties 4061
aminoarylsulfonanilidesulfonic acids. synthesis and properties 6907
ammonia and mercerization changes in cellulose crystallinity after treatment 4404
analysis of wool after treatment with alkalis, sulfuric and nitric acid and surfactant 1634
anodic oxidation. modification of carbon fiber composites 7481
arachidonic acid treatment. role in deactivation of cotton dust toxicity 8865
aramids and polyarylates with perfluoro-substituents on benzene ring. synthesis and properties 6386
azo dyes and dye intermediates. alkoxy groups incorporated to remove mutagenicity 7610
azo dyes. 5,10-dihydropheno phosphazine ring systems. dyes and intermediates nonmutagenic 7611
azo dyes. binding equilibria described by ion-exchange 6898
bending resistance. influence of chemical treatments. fiber fracture studied by scanning electron microscopy 837
binding kinetics of nonionic azo dyes by beta-naphthalene sulfonic acid-formaldehyde condensates 6908
carbamoyl ethyl starch derivatives 8554
carpets. static reduced with Viscostat and copper sulfate 8555
CDPET fibers. effect of alkali on structure 1653
cellulose staple fibers. modification gives antimicrobial properties 3257
ceramic fibers produced by conversion of silicon backbone inorganic polymers 4050
corrosion retarded by quaternary ammonium salts 3962
cotton fabric. reactive dyeing and chemical modification with acrylamide 6901
cotton graft copolymers. hypochlorite oxidation 2223
curcumin colorant. electrophilic breakdown by ozone 8917
CVD coating superconductor material onto small fibers 4836
cystein oxidation at surface of wool fibers. removal of cleaved proteins needed for shrink resistance 4771
diazo coupling reactions with aminohydroxynaphthalene sulfonic acids 3963
diazonium component in azodisperse dyes 6128
dicyanovinyl-substituted dimethoxybenzenes. absorption spectra 6909
dispersed dye systems. performance of lignosulfonate dispersant depends on bonded cation 436
dyeability of polyester fibers improved through liquid or powder agents from Sanyo 5197
dyeing modified cellulose fibers. results in terms of color strength 6873
dyes, phenothiazine, molecular modification 7618
E-glass fibers. surfaces modified by silane coupling agents 4049
encapsulate or immobilize cells, enzymes, and other biological materials. production process for materials to filament 3964
ethanol, sodium hydroxide, hydrochloric acid treatments and effectiveness in endotoxin reduction in cotton dust 8881
ethanolic compounds. detoxification of cotton dust endotoxins 8866
flax element in polyester blends. dyeability and resistance 5152
flax/polyester fabric. DEAE treatment for improved dyeability 2704
fluorescent coumarins and quinolines. summary of research at University of Bombay 7615
glass fibers. inverse gas chromatographic methods for surface interaction with silanes 8107
hindered amines protect polyolefins against photooxidation 7923
hydrolase used in degumming silk fabrics 8455
hydrolysis. auxiliaries for reducing cellulose powder agglomeration 3565
interphase engineering for tailoring the mechanical property of composite materials 6733
itaconic acid used as comonomer in acrylic fiber. carbon fiber precursor 8081
jute composites. new jute markets 6469
jute fibers. effect on moisture regain and mechanical properties 7999
jute. reduction of moisture regain 7278
Kevlar 49, surface hydrolysis with sodium hydroxide 6140
kinetics of melt polycondensation of bisphenol-A diacetate and isophthalic acid 6387
lignosulfonate dispersants. effect of cation type 4453
mercerization of cotton 2727
mesophase transitions in model liquid crystalline polyesters studies by synchrotron radiation 4694
modified nylon 6. physicomechanical and spectral properties 7341
monoazo dyes. synthesis and applications 6911
Nitron. reaction with nickel during chemical metalization 4893
nylon 6 fibers. graft polymerization 7321
nylon grafted to acrylonitrile and reacted with sulfur and copper to lower resistivity 902
oil solubilization kinetics and geometry of surfactant structure 2082
oxidation of pins used in apparel manufacture 3708
PAN gel fiber. surface modification with long chain salts for antistatic properties 4829
PET modified with PBT. sequential melt-blending and spinning 4053
pigments. anthranilic acid, substituted hydroxy aldehydes 7630
poly(p-phenylene benzobisthiazole) fibers. synthesis, structure, and properties 4067
polycondensation of bisphenol-A acetate and isophthalic acid. reaction kinetics 7924
polyester dyeability improved by adding dimethyl ester of 5-sulfoisophthalic acid 6113
polyester hollow fibers. void morphology after treatment with sodium hydroxide 5704
polyester modified with ethylene polyglycol, metallic dyeing, improvements 4441
polyester textured woven and knitted fabrics. chemical processing sequence 6820
polyethylene glycol bonds with fabrics. capable storing and releasing thermal energy 1255
polyethylene terephthalate and nylon. chain extension in extruder 3840
polyethylene terephthalate fiber treated with methylamine 5702
polyethylene terephthalate. nucleating reagent added during high speed melt spinning 7347
polymethacrylic acid and cotton. results when dyed with copper basic dyes 7589
polymethylacrylate leather coating, modification with radiation, GKZh-94 492
polymethylene terephthalate. synthesis and properties 6388
polypropylene. molecular damage and stabilizing agents 5700
preparation of cotton dust samples after solvent treatment for endotoxin reduction 8886
reactive polymers used in textile finishing 3661
reduction of cotton dust endotoxins, amines, and tannins with solvent treatments 8888
reinforced thermoplastics. enhanced interfacial adhesion between matrix and fibers 7311
rubfastness tested with aggregated iron oxide 7512
sericin fixation of silk. aldehyde treatments 8551
silk crosslinked with bis(beta-cyanatoethyl) disulfide 1617
silk. abrasion resistance and morphological changes 8002
sodium bisulfate. uses for conferring antifelting properties on wool 2783
sodium dilithionate as decolorizing agent in dye process wastewater 7179
strength degradation of Kevlar 49 due to stress and nitrogen oxides 4650
sulfuric acid/urea pretreatment of viscose precursor to carbonizing 8028
surface of Kevlar fibers modified by methylation reaction to improve adhesion to polymethyl methacrylate 8130
T-300 carbon fiber surface modification to enhance bonding. determination of chemical nature of treated fiber surfaces 7480

thermotropic aromatic copolyesters. synthesis and properties 5709
thioanthraquinone dyes. synthesis and properties 6917
West Germany, postwar textile developments. VTCC fortieth birthday 6419
wicking ability of polyethylene terephthalate fabrics enhanced by plasma polymerization of nitro compounds 7548
xanthogenation of cellulose. kinetics by reverse method 1648
yellow zircon dye. synthesis from oxides of silicon and zircon using thermal process 6919

CHEMICALS, SEE TEXTILE CHEMICALS AND UNDER SPECIFIC SUBJECTS.

CHEMICAL TESTING (SEE ALSO OTHER HEADINGS SUCH AS BLEND TESTING, CHROMATOGRAPHIC ANALYSIS, SPECTRUM ANALYSIS, AND UNDER HEADINGS OF SPECIFIC SUBJECTS)
alkalies and effects on geotextiles 6771
Chapman reaction of hydroxycoumarins 765
chemical testing, fiber sizing agents 4160
cotton yarns damaged by chemicals during processing. testing and evaluating damage 2210
fabric preparation. test methods for chemicals and auxiliaries 6849
Formaldemeter from Shirley Institute. determines formaldehyde release. instrument, testing process 5513
free formaldehyde in solution. vapor transport method 7089
LAM and LLM. steric configuration. influence on antibacterial effect 3553
oxygen-based chemical bleaches for textile rental industry 5393
polyamide fibers. dyeing behavior influenced by amino groups, comonomer groups. chemical analysis 4438
polyester. alkaline saponification rates, results 6273
polyester/silk and polyester/wool blends analyzed with trichloroacetic acid and methylene chloride 6266
silicone aqueous emulsions. determination of silicone content 8742
silicone fluids in aqueous systems. analysis of silicone emulsions 7090
silk fibroin degradation, method of estimation 766
Soxhlet extraction for scoured wools. comparison of different solvents 8448
surface active agent detection, in solution and on fabric surfaces 8723
ultraviolet sensitivity. effectiveness of optical finishing agents, on wool 4649
weight proportion of benzoic acid in molten caprolactam. indicator for titrimetric determination 5473
wool. chemical analysis of traditional insect resist agents 3065

CHEMISTRY, SEE UNDER SPECIFIC SUBJECTS.

CHINON (K-6) IS A MANMADE FIBER.

CHROMATOGRAPHIC ANALYSIS (SEE ALSO OTHER HEADINGS, SUCH AS COLOR MATCHING, ELECTRON MICROSCOPY, FABRIC TESTING, FIBER TESTING, IDENTIFICATION, RADIOACTIVE TRACERS, SPECTRUM ANALYSIS, TEXTILE TESTING, YARN TESTING, X-RAY)
bis(dithiobenzyl) nickel compounds. singlet oxygen quenching efficiency. gas chromatography 7926
durable press agents, formaldehyde derivatives of cyclic ureas 676
durable press agents. gas chromatography/mass spectrometry analysis 2793
gas chromatography/mass spectrometry 677
high pressure liquid chromatography. nonionic surfactant on wool. measurement 6481
lipids in wool 8007
manganese traces, determination of presence in materials. colorimetric analysis 4670
microcrystalline cellulose from water hyacinth found an acceptable adsorbent for thin-layer chromatography 6429
red madder and insect dyes on ancient textiles identified by thin-layer chromatography 7619
surfactants on cotton. use of thin-layer chromatography prior to dyeing 4696
wool. pyrolysis-capillary column gas chromatography. detection and quantitation of insect-resist Mitin FF and acid dye 29

CHROMSPUN IS AN ACETATE FIBER.

CIGARETTE FILTERS, SEE FILTERS, TOW PROCESSING.

CLEANING, SEE CLEANING OF MACHINERY, DRYCLEANING, LAUNDERING, OPENING, WASHING, WASHING MACHINERY.

CLEANING MACHINERY, SEE CLEANING OF MACHINERY, OPENING MACHINERY, WASHING MACHINERY, AND SPECIFIC MACHINERY.

CLEANING OF MACHINERY (SEE ALSO UNDER HEADINGS OF SPECIFIC MACHINERY)
circular knitting machinery. cleaning methods. protective systems against dust and fluff accumulation 256
computer graphics, high resolution. carpet design 7033
frame filter press for bubble wash-out of viscose waste from filter elements 5542
knitting open end yarns and spring needle wear 5526
Luwa's Pneumabio blower/suction Model D traveling cleaner for weaving machinery 6646
Model 222.11 dye padder from Kuesters with automatic fast cleaning 5236

CLEVYL IS A VINYON FIBER.

CLOTHING, SEE APPAREL.

CLOTHING INDUSTRY, SEE APPAREL INDUSTRY.

CLOTHING MANUFACTURE, SEE APPAREL MANUFACTURE.

CLOTHING PLANTS, SEE APPAREL MANUFACTURING PLANTS.

CLOTH INSPECTION, SEE INSPECTION.

COATED FABRICS (SEE ALSO UNDER HEADINGS OF SPECIFIC FABRICS, SUCH AS LAMINATED FABRICS, LEATHER SUBSTITUTES, METALLIC FABRICS, MOLDING, ETC.)
acrylic polymer backcoating emulsions 8352
amino-acid based fabric. Dinkam from Unitaka 8362
apparatus used to measure water vapor resistance of coated and uncoated fabrics compared 3062
British standard for coated fabrics. BS 3424. test methods 269
ceramic coatings, evaluation 6947
coated abrasives. developments 2632
coating materials for nonwovens treated for thermobonding capability 3483
computer usage in coatings research and development 720
Cordura leggings, anti-snake bite 5988
developments in coated fabrics and coating technology 3671
diapers. barrier coating waistbands to increase dryness 1358
Federal Test Method Standard No. 191A. listing 668
finishes, spin. effects on coated industrial fabrics 6039
flammability test methods, small scale 3058
furniture fabrics coated with latex on reverse side. coating dissolved by some solvents 7702
glass woven fabric finished with coated synthetic resins 1852
heat reflective fabric with aluminized face. Reflespace. France 8401
heatsetting 1074
HercuFlex impregnated fiber glass yarns reinforcing coated fabrics. PPG Industries 8207
introductory course to textiles and textile technology 7258
Japanese companies produce fabrics for skiing 6804
manufacturing methods. trends in materials and manufacturing 270
metalized fabrics. techniques and applications 8410

MicroPore develops waterproof, breathable fabric with Kynar Flex 2800 film, for outdoor sportswear 6721
polyurethane. substrate and coating method. history, chemistry 4484
PVDF-coated fabric by coagulation. Microspore membrane product 8361
rapier. technical textile production with Dornier weaving machine 4181
raw materials of fabric, effects on protective coating properties 1822
serviceability. furniture and coating materials 6284
silicone-rubber foam. RTF 762 for high performance composite fabrics 8548
sterile fabrics. Chicopee coated polyesters with crinkled, nonplanar surface 7467
Sunbeam microprocess membrane coated fabric. low cost alternative to Gore-Tex 8540
Transilon conveyor and processing belts from Siegling. coated with polyester for resistance to solvents 5295
trends in next five years. products, markets, prices, import competition 6000
Vertex glass fabrics. fiberglass products coated with M729 inorganic binder, superior flame resistance 4345
water soluble resins. fabric coating 5108

COATING (SEE ALSO OTHER HEADINGS, SUCH AS APPLICATORS, CARPET BACKINGS AND BACKCOATINGS, COATED FABRICS, FLOCKING, WATERPROOFING, AND UNDER HEADINGS OF SPECIFIC FABRICS)
acrylic polymer backcoating emulsions 8352
Acu-Fiber system for low-weight coating of hot melt adhesive 358
aluminum coating of polyethylene terephthalate fabrics, production 5318
boron and silicon carbide filaments coated with boron carbide or pyrocarbon and silicon carbide 5656
Butofan 45 from BASF. anionic dispersant for bonding nonwovens and coating or impregnating fabrics 6151
carpets. BSK-70/2 latex 5325
coating materials for nonwovens treated for thermobonding capability 3483
coating textile machinery components to increase abrasion resistance, durability 4748
coating with the BE8 contact finisher (Polmatex-Cenaro). tests with cotton, cotton/polyester fabrics 4480
communication standards for computerized equipment from the Textile and Apparel Machinery Modernization Foundation 6361
computers and microprocessors in dyeing and finishing 7553
copolymer glycolide and trimethylene carbonate for sutures, bioabsorbable. easier knotting 8559
copper/nickel coating of polyacrylonitrile fiber 4837
core-shell emulsion polymerization to prepare coating agents 1981
CVD coating of superconductor materials onto small fibers 4836
Czechoslovakian tests and methods on foam finishing. coating, carbonization, waterproofing 4394
developments at Textile Technology Forum 1796
developments in coated fabrics and coating technology 3671
DeVilbiss contactless spray applicators for high loft nonwovens 3677
diaper waistbands. hot melt moisture barriers 1359
elastic response of composite reinforced by coated fibers oriented in various directions 6302
fibers with superconductor material by chemical vapor deposition 6948
finishes. concentration determined by fibers needed as base in artificial knit fur 5326
formulation principles 8560
Heat Wave Schaetti 89 powder-point bonding unit for coating nonwovens 7464
impregnation, ultrasonic. glass and carbon filaments 5810
ITMA [1987]. development of Stork's rotary screen coating. increased production 6153
Kevlar pulp for thixotropy and mechanical reinforcement in sealants, adhesives, and coatings 3509
Kodaflex trioctyl trimellitate. primary plasticizer for vinyl (Trade Lit.) 8575
leather, artificial, thickness control device for production 491
machinery and techniques update. knife-over-roll. gravure. reverse roll 8561
Micro-Porotex, improved. filter media. MGF Gutsche 6154
new prepolymer providing solventless polyurethane moisture-cure coating 472
offline finishing technologies for nonwovens. coating. high vacuum metalizing 1042
oxygen atom interaction with materials. materials exposed to low Earth orbit space environment 7359
Parylene-C polymer evaluated as coating for fragile, degraded silk 7281
polyester fiber waste depolymerized for possible use as resin showed no film forming properties 6536
polymer application to artificial leather, model 6155
polymerization reactions induced by electron radiation 8443
polymethylacrylate leather coating, modification with radiation, GKZh-94 492
polyurethane and coating applications. production 7660
polyurethane dispersion in leather coating 6157
polyurethane. substrate and coating method. history, chemistry 4484
polyurethanes 478 6156
Porous Roll and Acu-Fiber hot melt extrusion system from Acumeter Laboratories 1260
PVC-plastisols. viscosity behavior on softening pastes 8558
PVDF-coated fabric by coagulation. Microspore membrane product 8361
Raufil PVC-coated monofilament bundle yarns from Rehau 3660
silicone-rubber foam. RTF 762 for high performance composite fabrics 8548
solvent effective on synthetic fibers, commercial and domestic use, not water-based, increases life up to four times 8541
spray nozzle and rotary screen coating methods 347
Stork Brabant CT-IV universal printing/impregnating system and printing paste preparation 3645
Sumiron HM-710 adhesive bandage. special solventless hot-melt process 7749
technology discussed at AICE colloquium 6365
Teflon. markets 8032
thermal adaptability. polymer coatings on fabrics. changes in cellulose after treatment 7642
water soluble resins. fabric coating 5108
Webcoter spray coating system for moving webs. Sono-Tek 1980

COILING MACHINERY

COIR

COLLAGEN FIBERS, SEE PROTEIN FIBERS, LEATHER SUBSTITUTES.

COLOR (SEE ALSO OTHER HEADINGS, SUCH AS COLORFASTNESS, DYEING, SPECTRUM ANALYSIS)
acidification treatment after sulfur dyeing, improved color, fastness 5210
active dye color cards for cotton fabrics found inaccurate using colorimetric analysis 5198
amalgamation of Wright and Guild color mixture data 2224
apparel, men's and women's. trends for [1989/1990] fabrics 7012
automotive materials. Society of Automotive Engineers 3848
calculation of Kubelka-Munk absorption and scattering coefficients. approach based on linear least squares technique 1197
chromatic color appearance using fluorescent light 8724
color difference formula. Color Measurement Committee 6292
color harmony. new applications of existing concepts 2225
color plated jacquard designs for knits on the KSC-E machine 5908
color preference. people and commodities relationship now and in

future 500
color processing mechanism. scalar and vector fundamentals 2226
color reproduction. influence of background on visual evaluation 3586
computer assisted technologies for coloring textiles. color measurement. more accurate 4424
computer to analyze color tone, from Japanese companies 5507
damage to fiber due to acid on natural fibers and rayon 2861
differential equation, relationship of fabric and dye, color intensity 4474
digital color images converted to areal dye densities for halftone hardcopy device 3580
Du Pont's Kevlar HT and HM fibers to be produced in color 3249
dyer's variables and lightness and chroma 6293
fashionable colors in [1989]. men's and women's fashions, change in color brightness and tones 8621
film compensation tables. computer generated 6286
fluorescent colorants' contribution to spectral radiance measured. Kubelka-Munk model 8740
forced response color matching trials 6289
Fry Uniform Chromaticity Scale Diagram 6290
garments. changed color with bleaching solution 5247
graphic design, color studies, color drawing 1508
home furnishings color predictions [1989] from Color Marketing Group 3021
illumination and reflectance design 6287
ink mixing behavior. modeling with polynomials 2235
jacquard weaving, interim color problems 218
Judd's [1951] color mixture diagram 3841
linen. effects of heat-induced aging on color, tensile, abrasion, dyeability 7476
machinery, textile. [1987] ITMA 6369
measurement systems and remote controls, software 8728
measurement. bi-directional optical geometry may be superior to integrating-sphere geometry for matching standards 3585
metameric blacks. statistical confirmation of Thornton's zero-crossing conjecture 2227
metameric colors. intersection of spectral curve 3844
metameric object colors 3587
model to predict hues, lightness, saturations, chromas of colors, brightness and colorfulness under different viewing conditions 1198
National Spinning Company color workshop and contests for talented design students 4799
Natural Color and Munsell Systems. color identification 3583
Optical Society of America Uniform Color Scales. visual uniformity 3584
Optical Society of America. color specimens and Uniform Color Scales 3842
quality control in dyeing industry 5199
recursive quadratic programming algorithm for color matching 3581
retinex theory 3845
saturation estimation at nine illumination levels for six hues and three reflectance levels 1199
Saunderson correction applied to translucent film laid over opaque substrate 3843
scaling procedures for color appearance 6294
sensation of color. interaction of eye, object viewed, light source 6850
shade sorting. microspace concept 3846
skin color affected by kimono collar 8725
spatial frequency and colorimetric purity examined using hue matching technique 3851
spectral tuning of opponent pathways. test size's influence 3589
trends [1988-1989]. factors influencing consumer preference 1200
tristimulus integration. weighted-ordinate method 3847
tristimulus values. calculation recommended by International Commission on Illumination 3852
tristimulus values. calculation 6295
vacuum extraction in vat and vat/disperse union dyeing polyester/cotton fabrics 4456
vat dyes in printing pastes. dispersion, coloration, recommendations 4479
VH-Color Magic color measuring system from Vald. Henriksen 7578
video digitizing system. colorimetric calibration 6288
visual and instrumental measurement 6296
visual perception. models 1201
weave and color order. color-and-weave effect 7421
wool. bleaching, removal of discoloration 6835
yellowness measurement compared with color appraisals made by Australian Wool Corporation 7808
zero-crossings for metameric blacks 3853

COLOR MATCHING (SEE ALSO OTHER HEADINGS, SUCH AS COMPUTERS AND PROGRAMMING, MONITORING SYSTEMS, SPECTRUM ANALYSIS)

Ahiba Colormat laboratory dyeing apparatus for research and development integrated color network 2755
Applied Color Systems Spectro Sensor II, Chroma-Calc program for color matching 404
calibration dyeing, computerized, for non-fluorescent dyeings 8469
CIE. [1931] and [1964] systems. significance to today's colorimetrists 1917
CMC color matching formula 678
Colimage software by High-Tex-Systems. options and requirements 7136
color appearance and brightness of chromatic object colors 8727
color control problems. computerized color control 1202
color matching functions. fundamentals 2226
color matching. Applied Color Systems' software programs for exhaust and continuous dyeing and printing 3591
colorimetric. pass/fail formulas 1203
computer aided dyeing, monitoring, control systems, correction 4424
computer color matching system from Kanebo. system features and advantages 5204
computer color matching. linear and quadratic optimization algorithms 2228
computer color matching. mixed integer programming algorithm 2229
computer programs 8474
computerized color matching. basic principles and benefits. development 2734
computerized color matching. implementation guidelines 8470
computerized system in Amital's dyehouse 8828
computers and microprocessors in dyeing and finishing 7553
consistency of color matching in fabrics, causes of mismatching. inspection, measuring instruments 6851
Datacolor colorimetric system in Soviet wool institute. uses, deficiencies 5207
developments in color management systems at ITMA 2735
Eikonix's color computer aided design system 5312
forced response color matching trials 6289
I.C.S. color matching and measurement system, machinery 405
Kensaikan's Scotdic color coding system. Hoechst's assistance program 6102
Macbeth's color formulation system, OptiMatch and Color-Eye. specifications 1205
match prediction. color measurement. fiber blending. weighing and dispensing 7577
personal computers and color matching in silk print dyeing 2736
polyester/cotton blends. dyeing results from not matching fiber components to primary shade 8482
recursive quadratic programming algorithm 3581
software programs. Chroma-Calc from Applied Color Systems 8473
Stiles' 20 color matching functions and eye lens and macular optical densities 8726
systematization. pass/fail formulas. color matching 4687
systems. on-line non-contact measurement, remote control measurement 8728
tufted carpet patterns with sixteen million color graphics Skopien

computer 643
woolen fabrics. piece dyeing. problems with color uniformity 8471

COLOR MEASUREMENT
active dye color cards for cotton fabrics found inaccurate using colorimetric analysis 5198
Ahiba Colormat laboratory dyeing apparatus for research and development integrated color network 2755
automotive materials. Society of Automotive Engineers 3848
bi-directional optical geometry may be superior to integrating-sphere geometry for matching standards 3585
chromatic and geometric attributes of textiles 4422
CIE system of colorimetry. [1931, 1964] experiments 679
CIELAB color space and CMC color difference equation. effect of visual step concept 680
color change with benzl alcohol, measurement, reduces washing time 5309
color difference formula. Color Measurement Committee 6292
color reproduction. influence of background on visual evaluation 3586
colorimeters. factors to consider when purchasing 4423
colorimetric devices at [1987] ITMA. computer-aided, on-line optics 4688
computer aided dyeing, monitoring, control systems, correction 4424
computer programs 8474
cotton. white and light spotted, low middling and strict low middling. reevaluation 7579
Datacolor colorimetric system in Soviet wool institute. uses, deficiencies 5207
Datacolor's system, dye recipes, quality control 406
developments in color measurement and control. instruments, equipment 2737
dyed woven wool fabrics, KTs-2 optical color measurement tester 1218
dyer's variables and lightness and chroma 6293
effluent coloration measurement and turbidity influence 4689
Eurocolor patterns. measurement of accuracy 3582
finishing machinery, ITMA [1987] Paris. process control, automation 1183
Fry Uniform Chromaticity Scale Diagram 6290
human perception of value and chroma differences in color pile fabrics 1459
I.C.S. color matching and measurement system, machinery 405
instrumental color measurement advances. shade sorting 1460
Instrumental Color Systems. unified system of color measurement 3940
instrumental colorimetry. evaluation of proposals presented at [1987] ITMA 6852
instruments, solution to mismatched colors in apparel 6851
ITMA [1987]. analysis systems 2305
ITMA [1987]. wet processing machinery 1237
Judd's [1951] color mixture diagram 3841
Kensaikan's Scotdic color coding system. Hoechst's assistance program 6102
Kirstol Limited's Color measurement equipment from Hunterlab, software 5278
Macbeth's color formulation system, OptiMatch and Color-Eye. specifications 1205
match prediction. color measurement. fiber blending. weighing and dispensing 7577
metameric object colors 3587
Natural Color and Munsell Systems. color identification 3583
nylon 6, polyester, cotton/polyester artificial leather, colorimetric analysis 5200
online color measurement. importance of numerical information to detect color variations in dyed cotton fabrics 3849
online. factors causing shade changes 681
opaque fluorescent materials. spectrofluorimetric measurement 3588
Optical Society of America Uniform Color Scales. visual uniformity 3584
Optical Society of America. color specimens and Uniform Color Scales 3842
patterned silk fabric. increasing software speed 682
reflectance computed from size and refractive index of paints using multiple-scattering technique 6923
Saunderson correction applied to translucent film laid over opaque substrate 3843
scaling procedures for color appearance 6294
shade sorting in United Kingdom. colorimeters interfaced with mini-computers 683
shade sorting systems. results not equivalent 3850
shade sorting. microspace concept 3846
soil repellency. plasma etching method 6945
soiling, color change, photoelectric testing 5123
spatial frequency and colorimetric purity examined using hue matching technique 3851
spectral tuning of opponent pathways. test size's influence 3589
standardized methods. New Zealand wool classification 5621
systematization. pass/fail formulas. color matching 4687
systems. on-line non-contact measurement, remote control measurement 8728
technology and formulation, measurement geometry 3064
technology overview. application to design and marketing 1461
tristimulus integration. weighted-ordinate method 3847
tristimulus values. calculation recommended by International Commission on Illumination 3852
tristimulus values. calculation 6295
UltraScan spectrophotometer by HunterLab 6291
unevenness samples 1204
VH-Color Magic color measuring system from Vald. Henriksen 7578
visual and instrumental 6296
whiteness formulae. comparison of Ciba-Geigy scale, visual assessment 8729
wool, raw. New Zealand standard test tentatively adopted by IWTO 845
wool. importance of whiteness for finishing. WRONZ measurement method 6934
zero-crossings for metameric blacks 3853

COLORFASTNESS (SEE ALSO OTHER HEADINGS, SUCH AS LIGHTFASTNESS, WASHFASTNESS)
acidification treatment after sulfur dyeing, improved color, fastness 5210
amino and thioether derivatives of dihydroxy anthraquinones 3622
apparel damage. fume fading from air pollution 4562
catalytic fading. casual effects among compound dyes 6860
cellulosic fabrics with grafted cationic groups compared 1211
chitosan treated silk. acid and reactive dyes 3653
chlorine. effect on colorfastness of cotton knit fabrics dyed with reactive dyes 395
colorfastness to bleaching with sodium percarbonate. test method 3053
controls, testing equipment, instruments. recent developments 2715
direct, azoic dyed materials affected by DMDHEU resin, softeners, silicone emulsions, flame retardant, other finishing agents 1251
drapes. sunlight degradation often appears only after cleaning. hazard of use 4643
flame retardant cellulosic fabrics. new invention for dyeing these fabrics 7590
Herforder Teppichfabrik's laboratory simulation of dye shading using the climate chamber system 2230
indigos. reaction with ozone. mechanisms and products 2771
leather. changes in dye color when exposed to ultraviolet light. causes, tests 4371
pigment fastness improved on polyester/cotton fabrics 458
pigment prints. rubbing fastness. influence of various parameters 7629
polypropylene fibers. solubilization of dyes during extrusion 2738
polyurethane based resins for new finishing effects. research by ROL 6149

Quality Control International. light fading and colorfastness testing 2213
reactant fixable dyes on cotton fabric. fastness properties 8488
reactive dyed cotton fabrics. DMDHEU finishing 6878
red azo dye. effects of ammonium salt containing flame retardants on discoloration 3590
Rongalite during washing after printing acetate knit fabrics, effect on colorfastness 5192
salt and pepper fabrics, problems with cleaning. causes and recommendations 7706
Sandolan MF range from Sandoz. characteristics, results 6115
Sandolan MF range. new dyes for wool 5223
SGS Quality Control claims defective dyeing processes cause color fading in garments 8522
staining values, measurement and evaluation 5201
structural effects of polymers on properties of coloration 6324
substituted diamino-2-methoxy anthraquinone dyes. fastness properties 2739
tests for dyed and printed goods. DIN standards. Xenotest and suntest 4690
thiadiazole disperse dyes with trifluoromethyl group 6916
transfer printing behavior and fastness properties of acrylonitrile grafted nylon 6 fabrics 6928
ultraviolet stabilizers used to reduce fading and degradation of museum textiles 5202
uniform fabrics. commercial. colorfastness tests 6758
variance in colorfastness in combination cloth and leather garments after cleaning 3733
water soluble dyed sweater bleeds after hand washing. mislabeled care instructions 6993
white wool garments. natural yellowing 3771
wool dyed with azo dyes 3625
wool fabrics. machine washable printing 2775
wool. factors influencing lightfastness, rubbing fastness, and wet fastness 4020
wool. improved fastness using anionic dyes with a new amino compound 6853
yellowing of white shirts. causes 7716

COMBING (SEE ALSO OTHER HEADINGS, SUCH AS CARDING, GILLING)
cotton. high speed comber performance 6564
fiber separation. measurement used to evaluate combing 657
prediction of combing performance of selected wool types and raw wool influence on processing 5458
recent developments in combing preparation and combing. prospects for automation 7369
Unilap combing preparation process. single and overall doubling 932
Unilap combing preparation system from Rieter 4911
Unilap process using E 7/5 comber and D 1/2 drafting frame from Rieter 4909
Unilap process using E 7/5 comber from Rieter 4910
Uster Sliverdata from Zellweger Uster. continuous monitoring 4926
wool processing steps. shearing to finishing 7402
wool, and worsted carding developments 933
wool. CSIRO symposium. papers presented on carding from aspect of combing 7367

COMBING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS CARDING MACHINERY, GILLING MACHINERY)
comb bar improves blowroom action. BTRA 8153
fiber separation. measurement used to evaluate pin and metallic combing rollers 657
fly comb. reduction of inertia action. importance of rigidity of attachment 6565
Fratelli Marzoli's Model PX1 5735
GC-13 drafter, PB-29 LF comber, worsted system, sliver quality 126
ITMA [1987]. automation in spinning processes 4099
ITMA [1987]. cotton spinning highlights 942
ITMA [1987]. detailed survey 5593
ITMA [1987]. offerings in worsted spinning systems and yarn preparatory machinery 3323
ITMA [1987]. spinning and spinning preparation machinery 5750
Japanese spinners concentrate on winding and combing machinery over spindles and rotors 6595
LapCenter 820 from Zinser. integrated production stages 8152
Leipzig Autumn Fair. Textima exhibits 1524
Marzoli's P X1 comber, NSL/L-2 ring spinning frame, and blowroom machines 4084
Model RD 300 ribbon lapping machine from Vauk Macchine Tessili 3333
Schlumberger & Cie. company history 8787
short staple spinning. a practical guide to combing and drawing from the Textile Institute 929
Unilap combing preparation system. Rieter 4911 5736
Unilap from Rieter at [1987] ITMA 4124
Unilap process using E 7/5 comber and D 1/2 drafting frame from Rieter 4909
Unilap process using E 7/5 comber from Rieter 4910

COMFORT (SEE ALSO OTHER HEADINGS, SUCH AS HEALTHCARE AND MEDICAL TEXTILES, HEAT PHENOMENA, MOISTURE PHENOMENA)
active wear. comfort under changing environmental conditions (Conf. Paper) 8633
American Sun's Vivrelle polyoxamide comfort fiber 5672
anoraks. warmth and wind resistance 6242
apparel designed according to architectural principles 4522
apparel, heat regulation, assessment of correlations between the human body and textile materials 1354
apparel, restrictions on mobility by types 8591
apparel. distance-proximity data 684
apparel. thermo-wet comfort. testing and assessment methods 685
beds 1429
bullet proof vests. MS-1 female body armor vest evaluation 7729
chemical protective clothing. liquid cooled undergarments and air cooled vests. performance 7734
clamminess. sensory mechanism studied with respect to wear comfort 1422
clothing comfort survey. English and Japanese office workers 2952
clothing pressure and tensile properties of materials 8632
convective heat transfer from human body. effect of fabric 1859
diapers. barrier coating waistbands to increase dryness 1358
Dunova modacrylic fiber in multilayer athletic fabrics 3280
fabric evoked pickle. cause and prevention 979
fabrics. thermal resistance and air permeability in Japanese fabrics 8391
fallacies about effect of synthetic fibers on skin 3274
Fiber S. new comfort fiber from Snia Fibre. properties 4892 5721
finishing agents influence on fabric 8433
girdles analyzed 8625
glove liners. effect on sweat rate. comfort and psychomotor task performance 2975
hosiery. Cotton Tops from Round The Clock 8637
incontinence pad coverstocks and effects on patients' skin. softness and hand of different coverstock materials 7745
knit fabrics. regenerated viscose contribution 3256
natural wastes and polyetherurethane for leather substitutes 5143
polyelectrolyte complex polymers, latex/polyelectrolyte artificial leather 6803
polyester fabric. improving comfort properties 3575
polyester fabrics. topical finishes, improving with fiber engineering 368
polyester. modification of fibers and yarns (Conf. Paper) 8033
polypropylene apparel. comfort aspects 1355
polypropylene knitted fabric. comfort study 289
polypropylene undergarments for cold weather 1312
prickle and itch caused by wool fabrics reduced by flat setting 4383
prickle resulting from skin contact with fabric 7483
prickle. allergic response versus mechanical irritation with wool clothing 6740

rainwear. waterproof and vapor permeability of fabrics on the market 7721
ramie fabric. wearability study 2696
research, present and future. textile science and engineering 6029
Rhovyl from Rhone Poulenc. chloro-fiber with improved properties 6550
skin irritations, prickle and itch, from fabrics. study 6753
sportswear 7020
study evaluates womanliness of apparel 7016
Teijin and Unitika. fabric for sports apparel which absorbs and evaporates perspiration 6792
textiles. comfort assessment, heat transfer, moisture to vapor and liquid to moisture transmission 666
thermal behavior of clothing 601
thermal strain of soldiers. reduction by air cooled vest 7738
undergarments, polypropylene. in cold weather. comfort consideration 1312
underwear made from polypropylene blends 7720
viscose/polyester, viscose/polyacrylonitrile, comfort testing 315
wearer comfort of knits and cumulative effects of soiling and washing 6790
wool. thermophysiological characteristics of wool compared to other apparel fibers 2438
woven fabric, moisture transfer. model for apparel comfort testing methods 5469
woven glass filament fabrics measured for physical thermal-wet comfort and air permeability 376

COMPOSITE FIBERS, SEE MANMADE FIBERS AND SPECIFIC FIBERS.

COMPOSITES (SEE ALSO OTHER HEADINGS, SUCH AS CARBON FIBERS, INORGANIC FIBERS, LAMINATED FABRICS, LAMINATES, LEATHER SUBSTITUTES, MOLDING, RUBBER PRODUCTS)
3-D braided commingled carbon fiber/PEEK composites 4302
ablation phenomena in reinforced phenol resin matrix composites 1823
adhesion between reinforcement and matrix. measurement 2215
advanced composites on display at SAMPE 6742
advanced polymer composites for specialized performance products 4311
advances in carbon fiber technology and products 5654
Aeroior. carbon/carbon composites from Le Carbone-Lorraine (Trade Lit.) 7484 7485 7486 7487
aircraft applications of composite materials 1075
aircraft firewall fabric. lightweight construction 2674
aircraft manufacture, substitutes for metal. virtues of thermoplastics over thermoset resins 3511
alumina fiber reinforced aluminum plates. tensile notch strength and endurance limit 6299
aramid composite systems. improved microcrack resistance 4312
AS/3501-6 graphite/epoxy composite. degradation caused by overheating 6001
ballistic armor from extended chain polyethylene fibers 4380
bitumen and flexible carrier fabrics as roofing materials. properties 291
boron-aluminum composite laminates. plasticity effect on free edge stresses 1824
boron/aluminum. tensile fracture process observed by scanning electron microscopy 686
braided preforms for composites. comparison of processes, structures and tensile properties 6717
braiding techniques, 3-D, for composite preforms 4267
buffer strips assessed for stress reduction concentration in composite laminate cutouts 1448
butadiyne vapor deposition on carbon fibers to promote adhesion to matrix resins 1046
Cadfiber. computer program for design 7134
carbon cloth reinforced epoxy resin composites. irradiated and annealed. effects on composites 292
carbon epoxy composite. damage sustained by repeated impact 2635
carbon fiber bismaleimide woven fabric prepregs. United States Army material specification 4315
carbon fiber composite materials. improved mechanical properties 2634
carbon fiber composites containing delaminations. load duration and fatigue behavior 6300
carbon fiber reinforced aluminum composite. corrosion 3854
carbon fiber reinforced composites 8364
carbon fiber reinforced epoxy laminate. effect of high temperature spikes 2636
carbon fiber reinforced PEEK. experimental autoclave for polymeric diaphragm forming of thermoplastics 4269
carbon fiber reinforced plastics. effect of fiber matrix interphase 6759
carbon fiber reinforced polyether ether ketone composites. fracture characteristics 7491
carbon fiber reinforced polyfurfuryl alcohol composites pyrolyzed to carbon/carbon composites. properties 6003
carbon fiber sandwiched between two nonwoven webs. improved toughness via use of thermoplastic interplies 4268
carbon fiber, glass and nonwoven polyester reinforced plastic laminates. chemical resistance comparisons 5109
carbon fiber-epoxy resin matrix interface. shear strength 4265
carbon fiber. modified by induced anodic oxidation 7481
carbon fiber. structure, properties, applications 1647
carbon fiber/aluminum composite interfaces 6743
carbon fiber/epoxy composites. aging effects on mechanical properties 4314
carbon fiber/PEEK laminates. falling weight impact test results 3512
carbon fiber/resin matrix interphase. effect of carbon fiber surface treatment on composite performance 4313
carbon fiber/tetrafunctional epoxy resin composite. modified with liquid carboxyl terminated nitrile 2633
carbon matrices reinforced with silicon carbide fibers 1047
carbon-epoxy. real time acoustic emission nondestructive evaluation of structural failure 2231
carbon/carbon composites, testing single fiber bundles for axial tension to failure 658
carbon/epoxy composites. testing for strength and lifetime 7821
carbon/glass/PMMA. mechanical properties at various temperatures 1076
Carbon/PPS and Carbon APC-2 thermoplastic materials. compression strength after impact 4303
Celanese Industrial Fibers' PEEK filament for use in thermoplastic composites 3295
ceramic fibers as reinforcement in thermoplastic composites 4316
ceramic fibers. potential hazards, toxic effects 7309
ceramic. for advanced heat engines. reinforcement types 1077
ceramic/polymer composites. Nextal fibers studied via Fourier transform infrared spectroscopy 7492
ceramics, advanced. applications. processing. properties 1078
Charpy type impact tests on injection molded short fiber reinforced polypropylene composites 7488
coating formulation principles 8560
Combined Sixth International and Second European Conference on Composite Materials. polymer-matrix and metal-matrix composites 3983
compocasting. ceramic-aluminum 1797
composite fiber adsorbent for uranium adsorption from seawater 8365
composite shell structures. free and forced nonlinear dynamics 1825
compression molded with parallel reinforcing filaments to prevent bends in fabric 7465
compressive failure of fiber-reinforced composites with brittle, weakly bonded constituents 8366
continuous fiber composites. measurement of small angle fiber misalignments 2216
continuous fiber reinforced thermoplastic, experimental nose wheel door 687
continuous fiber reinforced thermoplastics. polymeric diaphragm

forming. pilot autoclave development 2637
continuous laminates based on polyphenylene sulfide 980
continuous polyether ether ketone/carbon fiber reinforced thermoplastic composites. flow processes 4317
contour plotting displays mode shapes of free vibration and buckling 8354
crack rail shear specimen used to characterize Mode III interlaminar fracture toughness 3855
cracking direction in double-grooved tension-shear specimen 3856
creep behavior of SiC whisker reinforced aluminum composites 6004
crosslinking. anhydride-cured epoxy resin at carbon and graphite surface 1826
damage detected by thermo-acoustic measurement 6005
damage tolerance improved with toughened epoxy resins 6006
delamination caused by impact loading indicated by mismatching of bending stiffness 7493
delaminations in fiber reinforced composite plates caused by nonpenetrating impact 7494
dimensionally critical structures for spacecraft and electronics packaging 7306
disadvantages of high modulus polymeric fibers in reinforced composites (Conf. Paper) 8039
discontinuous fiber reinforced thermoplastic composites 4318
discontinuous fiber reinforced thermoplastics with high strength and stiffness 1079
Dow's Interfacial Testing System, measures interfacial shear strength of fiber-resin bonds 7165
Du Pont Avimid N polyimide chopped fiber molding compound. high performance parts 4304
Du Pont Kevlar HT and HM. properties and applications 5641
eigenfunctions applied to stress analysis of transversely isotropic composites 6301
elastic fields adjacent to graphite fibers in epoxy resin composites. polarizing microscopy 7495
elastic response of composite reinforced by coated fibers oriented in various directions 6302
elliptic rings of carbon fiber reinforced thermoplastics. spring constants 4319
end notched flexure used to study interlaminar fracture of graphite composites 6303
epoxy resins for stress-free high performance composites 4320
epoxy, carbon fiber reinforced. examination of fiber/matrix interfacial properties 8368
epoxy, carbon fiber reinforced. inverse gas chromatographic study of fiber surface energies 8367
epoxy, graphite fiber, epoxy graphite fiber composites. effects of ionizing radiation on properties 1827
epoxy/graphite fiber composites. mechanical property changes due to ionizing radiation 3513
ethylene copolymer resins. melt blown webs 5668
fabric substrates for carbon fiber reinforced carbon composites 8340
fabrics of composite fibers, manufacturing techniques 6718
fiber cement corrugated sheeting. load predicted with finite element analysis 3514
fiber composites. tensor transformations and failure criteria 8355
fiber orientation control in short fiber composite by loading magnetic moment 6007
fiber profiling in forming maximally reinforced organic resin fiber composites 7333
fiber reinforced composite plates. prediction of impact induced delaminations 4671
fiber reinforced composites for aerospace applications. fracture toughness of brittle epoxy resins 6008
fiber reinforced metal composites. improved strength properties 8369
fiber reinforced plastics. transport applications research 367
fiber-polymer interface properties. test methods examined 2217
fiber. material design concept 1080
fiber/resin ratio of advanced composites. nondestructive determination by ultrasonic technique 4672
Fiberite 976 resin. cure and moisture 6002
Fiberite T300/934 graphite/epoxy plates. matrix cracking and delamination caused by impact 7489
fibers in composites. TRI studies 2638
fibrous composites. effect of load on tensile strength 6304
filament winding process. kinetic, heat transfer models 8353
filament wound composite cylinders. electrothermal curing 5958
filament wound composites. finite element analysis characterizes effect process parameters on cycle time 4270
filament wound cylinders. manufacturing stresses and strains 4321
finite element analysis of advanced composites. integrated approach 4673
fire resistant Kevlar composite interior panels for commercial aircraft 4322
flexural and tensile strengths compared 8370
Fourier transform infrared spectroscopy used to study high performance fiber surface reactions 7338
Fourth International Conference on Composite Structures, conference papers 3984
fracture behavior of E-glass/polyester composite crack arrestor 6009
fracture mechanics of unidirectional composites. shear lag model 7496 7822
fracture surface analysis of carbon fiber reinforced polyether ether ketone composites 767
FRP piping. strength prediction 1435
geocomposite drains. testing, comparing products 7831
geotextile composites of polypropylene and polyester by Akzo 1058
glass polyester laminates. stress-rupture times. effect of temperature 2639
glass-ceramic composites for high temperature use (Conf. Paper) 8375
Graflok. unidirectional carbon fiber reinforcement from Heinsco Limited 1147
graphite and polyetheretherketone 981
graphite epoxy laminates. interlaminar fracture toughness. effect of selective adhesive interleaving 2641
graphite fiber composites. fiber surface chemistry. shear strength and thermo-oxidative stability 4324
graphite fiber reinforced PEEK. crystallinity effects on mechanical properties 1828
graphite fiber reinforced, metal-matrix composite. residual thermal stress 3515
graphite fiber/polyether ether ketone. effects of lamination process cooling rate 4325
graphite fluoride fibers in composite fiber structures. high thermal conductivity material 7498
graphite fluoride fibers. synthesis, properties, applications 1829
graphite reinforced composites. laser curing 1048
graphite reinforced thermoplastics. failure studied for static and fatigue loadings 7499
graphite-aluminum composite. fiber anisotropic thermal expansion and residual thermal stress 2640
graphite-epoxy. effect of cutting speed on quality of machined region 2232
graphite/epoxy composite. thermal damage effects on delamination toughness 7497
graphite/epoxy composites. interleaving improvement of toughness 4326
graphite/epoxy laminate. dynamic delamination fracture toughness 3516
graphite/glass composites. thermal expansion hysteresis 4323
HDPE/PET. orientation stretching 8023
high performance polymer matrix composites. deterioration in aerospace environments 7500
high performance sandwich panels from resin impregnated braided tubes 4327
hybrid graphite/epoxy laminates. thermal cycling effects on dimensional stability 4370
hygrothermomechanical fiber composite fatigue. simulation 4328

IITRI Compression Test evaluation 7819
IITRI Compression Test Method 6297
impact resistance of carbon fiber reinforced epoxy and polyether ether ketone composites 6305
impact testing with instrumented drop weight impact testing investigations (Tech. Rept.) 8711
INDEX [1987] Congress Papers. Session A5. New Ideas 1162
interface problem between aramid fibers and matrix resin in fiber reinforced plastics 6496
interface properties of fiber, polymer composites 3517
interfaces, analytical techniques 7207
interfacial properties of carbon fiber reinforced composites. mechanical performance 1081
interfacial strength of advanced composites. Interfacial Testing System 4674
interlaminar fracture toughness testing of composites. analytical compliance method 688
internally pressurized sandwich walled graphite epoxy cylinders. damage tolerance 4329
International Conference on Analytical and Testing Methodologies for Design and Advanced Materials, conference papers 3985
interphase engineering for tailoring the mechanical property of composite materials 6733
J-1 polymer matrix reinforced with Kevlar. crystallization and processing behavior 8730
J-2 amorphous polyamide copolymer. thermoplastic matrix for high performance composites 4305
jute composites. new jute markets 6469
Karl Mayer RS 2 DS-V raschel machine 8325
Kevlar HX from Du Pont. second generation fiber for use in composites 8018
Kevlar pulp for thixotropy and mechanical reinforcement in sealants, adhesives, and coatings 3509
Kevlar/epoxy composites. compressive response 6298
laminated composites containing an elliptical opening. approximate stress analyses and fracture models 1871
laminated composites containing an elliptical opening. model modification 1830
laminated composites containing open hole. compression response 4330
laminated spunbonded carpet backing 3481
laminates, carbon fiber reinforced polyimides. notch sensitivity, fatigue loading 268
laminates. high performance. deformation and failure processes. matrix dominated behavior 7501
laminates. matrix cracks as a function of time 7847
Lantorine. aluminum nonwoven surfacing tissue 5996
loom. evaluation for ability to manufacture fiber pre-forms for gas turbine engines 7412
low velocity impact testing 6306
magazine weft raschel machine RS 3 MSU-V from Mayer. produce composite industrial fabrics 1029
mechanical properties. effects of curve 6010
Medicarb carbon fiber. reinforced surgical implant from Dunlop Medical Products 7746
metal matrix composites. types. possible aeronautical applications 1082
metal matrix. accelerated aging 8356
micromechanical analysis of prestressed composite laminates 7823
Mode III interlaminar fractures. split cantilever beam and edge delaminations 7820
multi-layer laminate for bicycle frames. Technique du Verre Tisse 1872
multiaxial fabrics 5110
multidimensional fiber reinforced composites. damage tolerance 4331
NASA-Langley research in high performance thermoplastics (Conf. Paper) 8678
nondestructive testing of carbon fiber reinforced composites used in airplanes 6307
nonwoven and Malimo fabric composites. material properties 1798
nonwoven. high added value. production 5985
nonwovens composite technologies 3548
notched carbon fiber composites. effect of environment on fatigue loading 7503
notched strength predictions. finite width 7502
nylon 66. modified. two short fiber composites tested under stress rupture conditions 293
off-axis tension test. end tab fabricated with fiberglass knit in silicon rubber matrix 7824
optical fibers embedded in composites. stress level and failure 6265
para-aramid fibers used to replace asbestos for reinforcement 8022
PBZ fibers in advanced composites for aircraft applications (Conf. Paper) 8034
PBZT fibers. mechanical properties. advantages, applications. composite properties 4871
PE/epoxy composites. fracture toughness 4306
PEEK. short fiber reinforced injection molded composites. microstructure and fracture toughness 290
PEEK/carbon fiber composites. carbon fiber effects on crystallization 8363
PEKK as thermoplastic matrix for high performance composites 4307
personal protection basket of fiber reinforced plastic 4332
plastic/metal composites. van der Pauw measurements of resistivity 6308
poly(p-phenylene benzobisthiazole) (PBT) and nylon composite fibers. method. properties 7350
polyamide yarn-air composite systems, heat transfer process 4864
polyamide-imide and polyphenylene sulfide reinforced with short carbon fiber. wear rates and friction mechanisms 6543
polyether ketone ketone polymer. high performance thermoplastic matrix system for composites 6546
polyetherimide filaments from Hoechst Celanese for matrix material 5630
polyethylene fiber reinforced composites. plasma surface treatment 4333
polyethylene melts filled with metal or carbon fibers. rheological properties under steady shear flow 5687
polyethylene/epoxy composites. melting, relaxation behavior 4334
polyimide composites based on Avimid K-111 prepregs 1049
polymer adsorption at interface of composite materials, chemistry 6744
polymer composites. sliding and abrasive wear 7825
polymer matrix in interlaminar crack growth 7310
polymeric. neoalkoxy titanate and zirconate coupling agents 6011
polyphenylene sulfide composites. filament winding and mechanical performance 4335
porous substrate bonded to substituted urea/urethane hydrogel 5107
PPTA fiber modified via ultrasonics for use in composites 7538
pre-impregnated. ultrasonic cutting from Design Technologies 4539
prepreg conformance to substrate 6012
prepreg tape conformance during automatic tape layup 4337
prepreg Torayca T800H/3900 series, high performance 4336
printing 6854
processing and testing of Texas cottons. properties, spinning performance, yarn quality 4809
protective clothing, ballistic. Spectra Shield 5989
Random Fiber Composite process from Dow Chemical, wet laid process for production of polymeric material 5957
random short fiber composite. fatigue damage evolution and associated anisotropic elastic property degradation 2642
randomly oriented viscoelastic short fiber composites. dynamic mechanical analysis 1831
reconstituted carbon fiber reinforced polyether ether ketone composites. tensile and flexural properties 6309
reinforced thermoplastics. enhanced interfacial adhesion between matrix and fibers 7311
reinforced, filament-wound. numerical control for winding mechanism 8232

reinforcement media, nonwovens. fluid flow 6013
report from FIND/SVP, advanced composite materials market at present and in future 4338
research in spin finish distribution and fabric pore structure at Textile Research Institute 1596
residual strain in carbon fibers/polyether ether ketone composites. Raman frequencies 6310
residual strength of carbon/epoxy composite subjected to repeated impact 7504
resin flow through cross-plied fiber beds 7505
resin impregnation system developed to adapt braiding to automated production of advanced composites 7463
resins evaluated for potential use in field repair of composite materials. thermal and mechanical properties of cured resins 7506
role of carbon fiber in manufacture and application 3253
SAMPE. Materials--Pathway to Future 4301
sandwich panel constructed from thin walled braided tubes. lightweight, high performance 6719
Scrinyl nonwoven web and reinforcement material. combined drawing and fibrillation processes 1151
shear failure in carbon fiber reinforced polyetherether ketone 3814
shear testing of neat thermoplastic resins and their unidirectional graphite composites 689
short aramid fiber reinforced thermoplastics. improved wear resistance 2643
short fiber composites using small diameter fibers. effect on mechanical properties 8371
short fiber reinforced polymers. derivation of crack resistance curve as function of crack extension. fracture toughness 3518
silicon carbide fiber reinforced aluminum. notch fatigue behavior 1832
simultaneous failure of all layers in laminated composites 6321
spacecraft applications project at North Carolina State 8372
Spectra fiber composites. ballistic performance 4308
Spectra fiber reinforced composites. ballistic protection 8099
Spectra fiber, gas plasma treatment yields epoxy composites 60671
Spectra polyethylene fiber composites. gas plasma treatment 4309
Spectra polyethylene fiber reinforced composite systems for high impact/microwave transparent radar domes 4310
Spectra Shield from Allied-Signal. for the armor body market 3510
spectroscopy, Raman. applications 6064
stainless steel wire reinforced aluminum matrix composites. high pressure squeeze casting 7466
steel fiber reinforced polymer concrete. effects of impregnation technique 1083
steel fiber reinforced polymer impregnated concrete. interfacial bond strength and porosity 7826
stiffness loss in composite laminates due to curved matrix cracks 6311
strength and toughness. critical stress intensity factor 3857
strength of multidirectional unnotched and notched composite laminates 6312
stress wave factor and transply crack density. correlation 7507
structure, visualizing through staining techniques 6282
surface resin rich graphite fiber composites. adhesively bonded. fracture. SEM/XPS analysis 2644
symmetrically laminated 36 DOF composite triangular plate. shear deformation 6313
symposium for impact testing of plastics, composites. research papers 7243
T-300 carbon fiber surface modification to enhance bonding. determination of chemical nature of treated fiber surfaces 7480
Techtextil 2. technical textiles, fiber reinforced materials. highlights 7899
tensile strength and fatigue life of SMC-R50 sheet molding compound composites. hole stress concentration 6014
TGDDM/DDS epoxy and T300/NARMCO 5208 composites exposed to ionizing radiation. effect on mechanical properties 7490
thermal characteristics of asbestos-nylon-epoxy composites. effect of fiber pretreatment 5722
thermal expansion hysteresis in graphite/glass composites. methods diminish effects 6745
Thermal Expansion Resin Transfer Molding process, braided fiber design, end products 5093
thermally cycled high temperature laminates. microcracking behavior 4339
thermo-oxidative stability of Celion 6000 graphite fiber, PMR-15 matrix resin, Celion 6000/PMR-15 composites 8357
thermoplastic amorphous polyimide resin, JD 861, by BP Advanced Composites 1051
thermoplastic based on PEEK and PEI for primary aerospace structure 4341
thermoplastic composite part formation. tension 4340
thermoplastic filament winding. heat transfer, heat flow phenomena 5111
thermoplastic matrix composites. model of manufacturing process 1833
thermoplastic matrix of polyether ketone ketone in carbon fiber reinforced composites. evaluation 7508
thermoplastic matrix 1050
thermoplastic. fiber reinforced for high strength products (Conf. Paper) 8038
thermoplastics, high temperature, correlated with composite counterparts 1084
thin-walled composite beams. properties under transverse load 7509
three dimensional braided composite preforms. post-impact damage performance 4342
three dimensional thermal stresses in angle-ply composite laminates 6015
time delay spectrometry. swept-frequency ultrasonic test 1462
time-of-flight C-scanning to inspect composites used in aerospace 3830
Torayca carbon stitching thread for z-directional laminates 4101
torsional buckling load of graphite/epoxy shafts 6314
toughened resin composites. mechanical properties 6315
transverse elastic moduli of unidirectional fiber composites, mathematical formula 1440
transverse thermal expansion coefficients 8373
Tsai-Wu Tensor Polynomial Strength Criterion. determination of normal interaction term 2214
two step braided composite system 4343
ultrafine high performance yarns for thermoplastic prepregs 4073
ultrasonic crack detection in composites made of graphite/aluminum 1463
unidirectional fiber reinforced composite model. in-place shear modulus determined from constituent material properties 3519
Uniflo U-501 from Vetrotex. manufacture of pultruded products 6741
vacuum bag molding technique for composite production 5949
variation of local compliance in cracked graphite fiber reinforced polyimide composite specimen 7510
vibration behavior of orthotropic rhombic plates relative to fiber orientation 3815
wave propagation features for oblique angles of incidence 6316
winding. thermoplastic impregnated tows of carbon, Kevlar and fiberglass. economics and properties 4174
worldwide growth in recent years 7105
woven fabrics. suitability for use in reinforced composite materials 7827
Young's modulus in piecewise-isotropic laminate with wavy patterns. micromechanics model 7846

COMPOSITES--GLASS FIBER REINFORCED
aluminum matrix, ceramic particles, short fibers, whiskers as reinforcement. review of literature 878
AS4 Graphite and E-Glass fibers in polyphenylene sulfide matrix 982
bending behavior of composite tubes with braided construction, study 6746
braided composite cylinders, mechanical properties using lateral

compressive testing 3520
carbon fiber, glass and nonwoven polyester reinforced plastic laminates. chemical resistance comparisons 5109
carbon/glass/PMMA. mechanical properties at various temperatures 1076
carded glass composites. design, structure, and properties 5959
Combitex 3028 from Straet Company for roofing reinforcements 8403
composites by Adzel combining glass fiber structure and thermoplastic matrices 8374
creep behavior of SiC whisker reinforced aluminum composites 6004
epoxy-amine-glass composite part. filament winding simulation 4346
fabric deformation. centrifugal forming of fiber reinforced plastic pipes 8423
fatigue crack propagation in injection molded nylon 66 reinforced with short and long glass fibers 3258
fiber reinforced thermoplastic injection molding, effect of weld line on strength 1085
fiber-polymer interface properties. test methods examined 2217
fiber. material design concept 1080
Fiberglas composite cable for prestressing concrete units 4344
fibers in composites. TRI studies 2638
fire resistant cargo liners for commercial aircraft. FAA regulations 4347
fracture behavior of E-glass/polyester composite crack arrestor 6009
fracture toughness and microstructure of injection-molded nylon 66 composites 7828
glass fiber reinforced plastics. mechanical and acoustic emission response 1870
glass fiber reinforced polymers. controlling materials and molding conditions to produce smooth surfaces 8333
hydrostatic pressure and water absorption 7511
market [1986] for Germany and Europe reveals strong growth 3874
microglass fibers from Bayer 8053
modified with inverse gas chromatographic methods. surface interaction with silanes 8107
nonalkaline glass fiber manufacture and products 5663
optical fiber. application in testing strain and damage 8731
osmotic blistering of glass fiber products in continuous contact with water 1052
Owens Corning bulked roving product. manufacturing process 5740
PEEK. short fiber reinforced injection molded composites. microstructure and fracture toughness 290
PET and glass-bead polystyrene compared for static moduli 8675
plasma grafting of allylamine onto glass fibers 4348
polyphenylene sulfide stampable composites. environmental effects 1834
resin formulation. effect on surface appearance 2645
resin impregnated, semi-rigid open grids of filament glass fibers for reinforcing roads and pavements. Bay Mills 1053
sheet molding compounds. corrosion behavior in water 4349
symposium for impact testing of plastics, composites. research papers 7243
thermal expansion hysteresis in graphite/glass composites. methods diminish effects 6745
thermoplastic filament winding. heat transfer, heat flow phenomena 5111
Vertex glass fabrics. performance and evaluation 4345

COMPUTERS AND PROGRAMMING (SEE ALSO UNDER OTHER HEADINGS, SUCH AS AUXILIARY EQUIPMENT, COLOR MATCHING, COLOR MEASUREMENT, INDUSTRIAL ENGINEERING, MANAGEMENT, MONITORING SYSTEMS, OPERATIONS RESEARCH, SIMULATION)

AAMA and University of Southwestern Louisiana open Apparel Computer Integrated manufacturing Center for research 6964
aerodynamic design, waste removal devices for rotor spinners 4104
air distribution and constant cross section ducts. design using Apple II microcomputer 746
air entanglement machine from Gilbos N.V. computer control with independent steering for each spindle 3371
algorithms. generation of knit fabric patterns 8279
analysis of cotton yarns' strength and elongation, compared to lab tests 4659
apparel companies. survey of amount and impact of computerization of apparel functions 2280
apparel component joining, precision control of lockstitch seam behavior 1503
apparel industry, CIM Linkage Council, voluntary standards. executives give views 5477
apparel industry, computer integrated manufacturing, CIM Linkage Council (CIM/LINC) 4513
apparel industry, United States. survival depends on automation, robotics, computer integrated management 5342
apparel industry. computer aided manufacturing and design from Xetal Systems 3695
apparel industry. survey software companies in United Kingdom 4716
apparel machinery at New York Hilton. Lectra's electronic pattern scanner, sewing machines 6166
apparel manufacture, various companies 5375
apparel manufacture. computer programs for simulating production conditions 6352
apparel manufacturing. patterns laid onto fabrics at Initial Garment Manufacturing 8631
apparel pattern pieces with computer design system for processing size calculations 3729
application to knitting machinery by Protti 5924
applications in making-up home furnishings 8605
applications of computer aided manufacturing for small apparel companies 3696
Applied Color Systems Spectro Sensor II, Chroma-Calc program for color matching 404
Arthur Andersen and Company's Systems Integration Center. demonstrations in computer integrated manufacturing 4511
artificial intelligence and the textile industry. expert systems 8811
artificial intelligence type computer color matching system from Kanebo, automatic color corrections in lots 5204
Atex control system by RPR. control and monitoring of texturing machines 6608
AutoCAD, software package for apparel manufacturers. university implementation 7673
automated control, testing, computers in cotton industry in USSR 5522
automation advances from Mahlo, Schlafhorst, Kannegiesser 7894
automation in Soviet knitting industry. areas and goals 5063
automation of continuous dyeing unit at Saic-Velcorex plant 6347
automation of handling and control of dyeing cycles in garment dyeing of knitwear 6847
automation, graphic representation of sinker knitting, universal code 5506
AVL Looms. on-screen design systems for handweavers and industry 998
awning graphics, how computer aided design can help in preparation 4717
awnings and canopies. computer aided engineering and testing 8661
B-spline function. application to apparel industry with CAD 717
bale opener. Blendomat BDT 019 from Truetzschler 8168
bale opening range. Optimix II 8167
bar code standards adopted at SAFLINC meeting. computer linkage codes make identification simple 719
bar codes felt to be requisite in the manufacturing industry within five years 8780
bar coding and electronic data interchange systems. standards. textile executives discuss advantages 3078
bar coding apparel, guidelines for Apparel Manufacturers Industry Show 5343
bar coding at Haggar for raw materials, tracking, finished goods

tickets 5357
bar coding pushed forward by vendor marking and need for inventory and production control 5358
bar coding system for apparel manufacture data processing 3910
bar coding technology and scanning for apparel industry. problems, advantages 2805
bar coding. special application of area rug inventory 3792
Barco Industries developed Sycotex system for computer integrated manufacturing with multiple applications (Trade Lit.) 8796
BASIC programming, introduction. graphics 8795
batch dyeing for yarns on cones and fabrics on beams. online analysis 1933
Bee Line Products of Dublin. solution of problems created by volume manufacturing 2813
Bentley's RTC/E, SPJ/ME, Komet knitters, computer control systems 245
Bobbin Show [1987]. computers and CAD systems 718
Bobbin Show [1988]. linking of sewing systems. emphasis 8966
Bobbin's annual survey of apparel industry software suppliers and directory 6171
Bonas CAPS 3 jacquard pattern preparation unit 5863
Brinkmann's model 2010 laser scanner. particle analysis 3861
BRITE project, CAD/CAM systems, communication and information, cutting, sewing, handling 2003
British fashion industry. research and development 5420
British weaving companies, recent machinery purchases and future plans for computerization 2587
Bruno Amsler's fancy hollow spindle machine with drafting mechanism 3349
Burlington's Lees/Link, direct access computer system for retailers 7036
CAD and weaving. limitations 5888
CAD for flat knitting machines. Universal MA-5500 pattern system 7135
CAD in weaving. improved creative, commercial and productive flexibility 8272
CAD integration in apparel manufacturing 7661
CAD linked to electronic jacquards for narrow fabrics 2584
CAD principles for dobby fabric weave 2588
CAD software needed for woven textile designs 8797
CAD systems for dyeing and printing shown at ITMA [1987]. innovations 6920
CAD systems. developments. uses and advantages. future 6350
CAD-CIM in spinning. developments at ITMA [1987] 5751
CAD-CIM in weaving. developments for jacquard and dobby shown at [1987] ITMA 6647
CAD. problems encountered in design reproduction. possible solutions 7872
CAD/CAM by High-Tex-Systems. Colimage system software for color matching 7136
CAD/CAM by Pastec for Monarch circular knitting machines 7453
CAD/CAM developments in apparel manufacture 3907
CAD/CAM for embroidery pattern programming and preparation 6677
CAD/CAM in multiphase circular knitting machines 7461
CAD/CAM shown at ITMA [1987] for crocheting patterns 6676
CAD/CAM system for most economical pattern cutting 7682
CAD/CAM systems shown at JIAM [1987]. cutting and spreading systems 2277
CAD/CAM. Universal pattern preparation unit MA 5500. Universal Uniscan 1 scanner 3906
Cadfiber. computer program for design 7134
cam driven looms. calculating shedding cam pressure angle 7411
Campeau Corporation to consolidate computer systems for Allied and Federated divisions 7139
card puncher upgraded for production of raschel knit home furnishing fabrics 8300
Carolina Creations. CAD in quilted fabrics 2628
Carpet and Rug Institute's industry-wide shipping label, uniform access system to computer network 7037
carpet design. flexible CAD system for ICN from Wharncliffe 5008
carpet design. Pattern Management System. Vertical Technologies 5865
carpet design. Vertical Technologies' Pattern Management System 2614
carpet industry, computerization. top twenty-five manufacturers, available equipment 2173
carpet manufacture. ITMA [1987] trends 6250
carpet patterns. tufted, and exact color matching with Skopien computer system 643
cellulosic absorbents. fluid migration measured by computed tomography 4686
centralized apparel manufacture systems at [1986] Bobbin Show 5364
chromatic and geometric attributes of textiles. measurement instruments 4422
CIM at ITMA [1987]. relation to CAD, CIM and PPS. emphasis on computerization 7873
CIM in textile manufacturing. topics of the First Reutlingen Textile Management Colloquium 3908
CIM systems for dyehouses. anticipation of total process control 8798
CIM systems from Uster 7137
CIM. objectives and possibilities in the garment industry 7138
circular knitting machines, ELHA from Lucas. electronic controls 3474
CIS, computer integrated spinning. Rieter 4107
cloth beam handling and transport system. automation. robotics. computer integrated weaving 5027
CMS V-bed flat knitting machines from Stoll. computerized pattern preparation 6706
CMS-series Selectanit computer controlled flat knitting machines from Stoll 3477
coated fabrics. computer usage in coatings research and development 720
cold pad-batch dye liquor formulation 6900
color control problems. computerized color control 1202
color matching programs for dyers and printers. Chroma-Calc from Applied Color Systems 8473
color matching, computerized. implementation guidelines 8470
color matching. Applied Color Systems' software programs for exhaust and continuous dyeing and printing 3591
color matching. calibration dyeing 8469
color measurement and matching software 8474
color measurement of patterned silk. increasing software speed 682
color measurement systems and remote control measurement software 8728
color measurement, technology overview. application to design and marketing 1461
color, recursive quadratic programming algorithm for color matching 3581
Color-CAD/CAM procedure BELLE. direct printing of textile fabric 7874
Colorex microprocessor exhaust dyeing control system from Schermuly-Elektronik 6884
Colorimeters interfaced with mini-computers 683
colorimetric devices, computer-aided operation. ITMA [1987] 4688
coloring system, Colimage computer aided, from High-Tex-Systems 6100
coloring textiles with computer-aid technologies. color measurement 4424
communications software by Apparel Computers System and Microdynamics 1504
complete automated systems for clothing construction developed in Japan, United States, and the European Community 7868
computer aided design system Jacquard-1, applications 5028
computer aided design systems at [1987] Bobbin Show 721
computer aided design. ICO Graphics exhibition [1987]. techniques 6359
computer aided manufacturing and design in Hong Kong apparel industry 7146
computer aided production system for Favrot. specific problems

7147
Computer Aided Tensile Testing System developed by Du Pont and Instron 1468
computer analysis to produce highest quality cotton fabrics on all loom types 4203
computer assisted movements in warpers. automatic data transmission 7410
computer color matching. linear and quadratic optimization algorithms 2228
computer color matching. mixed integer programming algorithm 2229
computer control and program of sewing machinery 4552
computer graphics, high resolution. carpet design 7033
Computer Integrated Manufacturing analyzed. guidelines for buyers 2278
Computer Integrated Spinning (CIS) systems 5762
computer integrated weaving with cloth beam handling and transport systems from Sulzer Ruti 3920
computer integrated weaving. developments by Sulzer for handling of beams 8251
computer program to control fabric use, norms 5372
computer science and textiles. conference sponsored by the Italian Assoc. of Cotton Manufacturers 7880
computer simulation disperse dye application to polyester fibers 459
computerized cutting and tie in to Eton's system for cloth transport to sewing station 8791
computerized cutting systems shown at the Bobbin Show/AAMA Convention in Atlanta 8601
computerized production management systems and loom efficiency 3427
computerized systems for carpet mill. BGD Computer Systems 7881
conductive carpet to protect computers and other electrical equipment from static electricity 7034
Conticon process automation system for jiggers manufactured by Kuesters 8444
continuous dyeing. optimizing efficiency of short batches 5248
contract carpets. computer aided design and computer driven tufting machinery 3798
control for warper angle of spindle rotation, brakes 4170
control system for Tatsumi T-4CR flat machine with simultaneous memory 8320
control system, speed and periodic action shearing control 4504
control systems for weaving from Barco, Zellweger-Uster, Computrol 8253
control systems. influence on quality in Polish knitting industry 8295
controls, testing equipment, instruments. recent developments 2715
cotton fibers. moisture content in laps and sliver, computerized method 123
cotton selection in manufacturing yarns of consistent quality 3319
cotton. data collection system to determine irregularities 176
Courtaulds North America. new electronic data interchange program 3883
Create Design EX CAD system by Ernst Benz. capabilities for design creation 7875
Create Design Ex from Benz. CAD system for printing 7580
CRI industry-wide shipping label system. computer access to retailers and distributors 5433
criteria for technological change, industry decisions, effect of technology 3068
custom information systems installed by United States apparel manufacturers 2281
cut and sew apparel industry. computer applications. electronic data interchange 3123
cutting room. Computer Integrated Manufacturing system from Assyst 2282
cutting systems, to ensure proper data entry for the process 531
data analysis model for computer integrated manufacturing 8812
data monitoring systems for Saurer Allma TM twisting machines. capabilities 7882
data processing system. CIM applications in textile and apparel industries. conference highlights 6353
data sampling in textile machinery. sampling techniques and hardware 4718
Datacolor colorimetric system in Soviet wool institute. uses, deficiencies 5207
Datacolor System from Datacolor. quality control and recipe formulation and storage for dye industry 8472
defect recognition software for knitting machines from the Institut fuer Textil- und Verfahrenstechnik 3124
Deimo pattern selection system for flat bed, circular, hosiery knitting 7876
Dennison Cutting Room Optiplan. software for cutting room, features 6183
design and manufacture of net curtains 8804
design and manufacture, impact on communication 1499
design possibilities on the Jumberca DWN-3E circular links-links machine 8308
design system for jacquard and warp knits. EAT Patro System 4206
design system, CAPS 3. jacquard textile patterning 223
design system, Jac-Art 2000. jacquard textile patterning 221
design systems for sinker knitting. universal matrix, encoding variables 234
Design-3 computer aided design system 8256
designing apparel. computer systems at Levi Strauss and Esprit 2284
designing industrial textiles based on ancient braiding techniques 1045
designing on the computer. curves 7148
designing textiles. systems and capabilities 2283
designing, DesignScope computer workstation. EAT 6668
development of a textile-oriented expert system 7149
development of yarn processing program 7883
Dextralog FS200 data collection and information system for tufting machines 1072
digital color images converted to areal dye densities for halftone hardcopy device 3580
digital control for sizer drying area. temperature, speed, moisture in warp 5000
digital measuring for Shima Seiki's SET 092 FF flat knitting machine 8316
directory of companies in United Kingdom selling production control systems 2285
diskette liner fabric magnetic media wipe test 7814
diskette nonwoven liner fabric/magnetic media dynamic contact in floppy disk 7541
dobbies, programmable computer controlled 4176
double sinker knitting, CAD program 5052
drycleaning and laundering companies, buying the correct equipment 3911
drycleaning industry. Data-Becker's Kalkumat program for the drycleaning industry 4563
drycleaning, applications of computers 2048
drying machinery 6957
Dubied's DUCAD II computer-aided design system, SDR 2 and JET 3 knitting machines 8312
dye bath exhaustion control. machinery from ITF-Nord 6118
dye laboratory converted into an automated production center 2733
dyehouse control, computerization at Magyarovar knitting factory 1919
dyehouse control. computerized process control developments 2741
dyehouse. computer integrated manufacturing. system for Gaston County Dyeing Machine 1935
dyeing and finishing machinery, advances in computers and microprocessors 5855
dyeing automation. programs. new SEDO products 1932
dyeing industry. planning and implementing integrated computer system 722
dyeing industry. production control 4427

dyeing machinery, programmable 5205
dyeing with Levafix dyestuffs in cold pad-batch process 4451
dyeing, computerized systems from Dosacolor 3125
dyeing, finishing, coating, drying/heat-setting, raising, cutting, color matching. control systems 7553
dyeing. color control systems from Applied Colour Systems 7604
dyeing. meterable dyes and computer programs for recipes 411
dyeing. Microcom control and supervising system. datalogging software packages. Vald. Henriksen 4428
dyeing. microprocessing as an aid to maximum production quality 4425
dyeing/extracting machines for hosiery, features of various systems 5241
East German apparel manufacturing company and their integrated computer system 3693
East German computer program projects for optimizing patterning and material use in pattern cutting 3713
East German computer workstations for rationalizing apparel manufacture 3694
East German studies on computer aided manufacturing in industry 3923
East German study on computer workstation working conditions in the textile industry 3924
EAT DesignScope textile CAD system 3403
economic effects of textile machine operation. determination of machine repair cycles 3126
EDI systems introduced at the Bobbin Show/AAMA Convention in September 8799
Elkonix's color computer aided design system 5312
Elcom 18 from Erhardt and Leimer. process control and communication system used in fabric manufacture 5499
electronic data interchange in retailers' future. according to Meretrends' study. advantages and successful programs 515
electronic jacquard heads and reading systems. advantages and drawbacks 8278
electronic jacquard selection by OSG/Sandonini for large diameter circular machines 7446
electronic jacquard transfer. Variatex 2500 in the Mecmor range 7447
electronics in the control and automation of wet processing 8437
Elitex's installation of microcomputer control in spinning mill for BD spinners 4103
Emmetronic transformation kit by Magrini. electronic selection for flat bed machines 8313
engineer programs for wool processing mills 5500
Engineered Fiber Selection developed by Cotton Incorporated 3215
Ernst and Whinney survey of Quick Response implementation, benefits 7101
exhaust dyehouse activities analyzed to increase profit margin 8813
expert system, OPTIMIST. cheese and cone dyeing. BASF 5215
expert system, Wooly from Sandoz. dye process optimization 5225
expert systems in finishing industry 4396
expert systems. Japanese Quick Response production study 8826
fabric design and manufacturing. computer-aided design system evaluated 7884
fabric design system, Tweed computer aided. Nino and IAM 5902
fabric design, CAD-CAM systems research at NCSU. industrial consortium 3129
fabric dust filtration. applying computer model to design filters 2316
fabric pilling. computer image analysis 8706
fabric quality control machines by IRO/Calator 738
fabrics. computer aided design 6354
factory control systems. considerations and definition of computer terminology 2822
fancy twisting machines. Saurer-Allma's ESP 1 and 2, FM-F 4128
FASLINC standards for product requirements between textile manufacturers and suppliers. workshops on Electronic Data Interchange 6395
FASLINC's guidelines to use computers for product demand forecasts and information on quality 7216
fiber image analysis 1441
Fiber Image Display and Measurement. mean wool fiber diameter 7805
filament winding to reinforce cores. computer simulation results in reduced time and materials consumption 3408
film compensation tables. computer generated 6286
Fimtessile shedding machines with electronic control and programming systems. advantages and performance 7408
finishing equipment and accessories exhibited at [1987] ITMA 7557
finishing. computer controlled continuous pretreatment range for cotton and PES cotton blends 4410
finishing. computer integrated manufacturing system 4719
finishing. KBU system controls drying, sizing, chemical concentrations 5162
Fischer. polymer and manmade fiber plants 5718
flange bobbin deformation during winding. computer program for bobbin strength and rigidity 191
flat bed knitting machines from eight Italian firms at [1987] ITMA 7456
flat bed knitting machines in Hungarian textile industry 1788
flat knitting machinery design innovations seen at ITMA Paris. CAD systems 1037
flat knitting machinery. Protti at [1987] ITMA 8315
Fleissner's two process carpet finishing line and dye applicator 4389
Flexible Manufacturing System (FMS) from Rieter 7156
flexural vibrations, computer analysis, design of machinery and drive 7171
floppy disk liner fabrics. effectiveness in wiping particles from media surfaces 7542
floppy disks. role of liner fabrics in controlling diskette torque, fibrous wiping of media, diskette durability 7543
formula for jacquard hosiery generates data for elasticity and yarn consumption 5054
Forth Valley Health Board's FLICS bar code linen tracking system for hospital laundries 4566
full fashioned straight bar knitting machines, computerized. Scheller 1038
fully programmable Stoll Selectanit knitting machines with electronic control 7458
future for computer automation in finishing sector. trends shown at ITMA [1987] exhibition 7556
Garan's EDI program for customer service, intercompany linkage 6172
garment dyeing and Quick Response, a necessary relationship according to Textile Apparel Linkage Council 3595
garment labeling in United Kingdom. impact of computers and new technologies 2035
garment length machines, electronically controlled, at ITMA Paris 1034
garment manufacture, fully integrated, FIGARMA. problems in automating the sequential sewing assembly 1506
garment piece block construction. designing at the graphics display board 1505
Gebrueder Loepfe FR-600 data processing for winding operations 3424
General Sewing Data system. setting time standards adapted to produce work tickets at manufacturing plants 4529
Gerber AM-5 CAD system for planning advance time in women's apparel manufacture 4519
German Assyst, cutting room computer systems control that integrates with other manufacturers' machinery 5376
GINQUAL digital simulation model predicts cotton quality 6434
Girmes installs comprehensive information processing system 8800
Graniteville's Gregg dyehouse. computer control and monitoring of processes 2743
graphic design, advantages and limitations 1509
graphic design, color studies, color drawing 1508
graphic representation of knitted structures 1507
Gruppo GMT apparel manufacture and Gerber CAD/CAM systems 6977
GTM loom by Picanol. possibilities for future developments 6641
Haggar and retailers. inventory control 3878

Haggar Order Transmission system for inventory replenishment used for men's and women's divisions 5501
Hanes Hosiery. automated data collection system using IBM PC AT and IBM 4381 for payroll, time, and attendance 3118
hardware and software for the carpet manufacturer and designer 7038
Herdmans linen spinning plant with latest computerized equipment 4923
Hills Department Stores' commitment to EDI. reasons and goals 7740
Hoechst Celanese's Computer Assisted Partnership Support system. mill access to company data banks 3119
Horizon shearing machine from Sellers. computer control and monitoring 2629
hosiery and underwear mills 4515
hosiery machine manufacturers, survey of electronic equipment 8291
hosiery machinery. computerization of pattern changing. [1988] International Hosiery Exposition 4224
Hungarian apparel cooperative. microcomputer for inventory and production control, orders 2293
Hungarian progress in computer aided apparel manufacture 8586
Hungarian textile mill offices. Telex systems, electronic mail, interoffice communications 702
Hungarian. labor and mill organization in Budapest Knitting Mill, computers 712
Hungary. textile mills. computer installation. improved production 266
hygrothermomechanical fiber composite fatigue. simulation 4328
IBM's Application System/400 for apparel manufacturers, retailers. models, software, extravaganza introduction 7140
IIC's Starfish for cotton knit fabric development 5899 8801
image analysis wool properties 3041
image processing used to design apparel and produce sewing patterns 1351
IMB [1988] at Cologne. overview of computer systems for design, manufacture and monitoring 7888
IMB [1988] pressing machinery. advances in programming, automation 6194
IMB [1988]. highlights 8587
Imece programmable steam ironing presses. the Carasello for knitted wear 8606
impact on Schiffli embroidery 7685
INA Systems Suspension/Bundle Online Real Time Production Management System in Swiss garment plant 3714
information processing system, integrated, for textile plant management 4704
innovations in knitting technology at [1987] ITMA 3471
innovations in package dyeing, products 6893
integral electronic selection in the new DWN-3E circular machine by Jumberca 8285
integrated data analysis system at Du Pont's Textile Fibers Manufacturing Department 2286
integrated information system to improve competitiveness of textile industry 3875
integrated. printing and finishing, Total Systems Control by Stork 6129
International Clothing Machine Fair [1988], CIM prominent 6165
International Clothing Machine Fair, IMB [1988]. focus on computer integrated manufacturing 6966
International Textile Machinery Exhibition [1987]. automation and instrumentation 6629
interpretation of statistical data for textile wet processing experiments 7046
Invesmark and Lectra E19 Graphics Workstation. computerized plaid matching systems 2829
Invesmove flexible production system for apparel manufacturing 4516
Investronica Matching System. cutting and matching striped, checked, and printed fabric electronically 1518
Item 807 program documentation for apparel imports. 807WORKS software program to handle paperwork 5573
ITMA [1987]. CAD and CIM in weaving. possibilities and limitations 5864
ITMA [1987]. computer aided production control for woolen spinning systems 5752
ITMA [1987]. computer integrated manufacturing 2291
ITMA [1987]. computers and manufacturing logistics 6351
ITMA [1987]. dyeing, finishing, and printing machinery. computers and automation 3557
ITMA [1987]. electronics in spinning and weaving 8830
ITMA [1987]. highlights of control and monitoring systems 730
ITMA [1987]. importance for woolen and worsted processing 4898
ITMA [1987]. innovations in wet processing machinery. application of process control 6821
ITMA [1987]. mechanical and electronic shedding motions, dobbies, and jacquards 5021
ITMA [1987]. nonwovens, new machinery. developments in fine and isotropic fiber webs 6720
ITMA [1987]. raising, shrinking, shearing, steaming, pressing, and inspection 5170
ITMA [1987]. weaving machinery. development trends 5889
ITMA [1987]. weaving preparation, developments 5868
ITMA [1987]. weaving technology refinements, microelectronics and computers 2574
ITMA [1987]. weaving. machines for narrow fabrics and advantages of computerization 6649
ITMA [1987]. wet processing equipment. computerized process control and management information systems 7565
Jac-CAD 2000 from Grosse. design studio system for jacquard knitting and weaving 7141
JACOMAT software for Staeubli jacquard machines 5067
jacquard design system for neckwear, color tone analyzer from various Japanese companies 5507
jacquard fabric weaves. database using IBM-PC applications for production 5031
jacquard weaving. development of electronics. innovations shown at ITMA [1987]. Brochier TLIF system 7409
jacquard, electronically controlled, from Bonas for fullwidth weaving 6653
Jacques Vert apparel manufacturer profile. lay planning, CAD systems 3687
Japan. textile and textile machinery industries overview. production control system in weaving mills 7877
Japanese spinning and weaving machinery, computer integrated 8840
Karl Mayer RS 3 MSU-N magazine weft raschel machine used by Amoco fabrics to make customized carpet backing 8302
Keisokki Classifault II computer based yarn fault classifying system 3824
kenaf fibers, acoustic testing device for tear load 14
Kirstol Limited's Color and Process System group, measurement equipment. dyeing control 5278
knit fabric characteristics using simulation models based on various fiber and yarn properties 2599
Knitmaster's DesignMaster Electronic. design and knit repeating and nonrepeating stitch patterns 4244
Knitscanner from Novakust. inspect knit fabrics in any structure, form, or size 6689
knitted fabric engineering programs 2597
knitting industry, domestic. influx of electronic technology a challenge. machinery at [1987] ITMA 4242
knitting machine utilization by different work shifts. analysis 1510
knitting machine, flat, Sirio 4000 from EMM. computerized patterning 5942
knitting machine, flat. Sirio 4000 from EMM 6708
knitting machinery trends and developments seen at ITMA Paris. computer graphics 1033
knitting machinery, flat. from Stoll 8319
knitting machinery. computer applications to link industry segments 3127
knitting machinery. full fashioned. Omatex Rimach's J 290 F with electronic control 6674
knitting, circular and flat, at ITMA [1987]. innovations from Mayer

5059
knitting. reducing setup time by improving machine technology 5058
knitting. Variatex TEJ by Mecmor, 180 series 5920
knitwear industry CAD systems applications. MicroDesign system 1022
Knoll Textiles' installation of a computerized storage tube, rack, and bin system for textiles. advantages 3909
Kontis C4-330 multiple shed loom in Perla Cotton Weaving Mill, abilities, computer control 4190
Kuris High Tech System. computer integrated manufacturing 2837
labeling, computer design systems, online with manufacturers, retailers for Quick Response 2972
Labomat high temperature laboratory dyeing unit with infrared heating 7601
laboratory software. evaluation 3912
laboratory. Colorstar from Zeltex. with computerized process control 5232
Lectra automatic pattern scanning system 3120
Lectra Systems computerized digitization and grading systems 3705
Levi's computer production tracking system 7867
linen shortages in hospitals, problem solved by in-house computerized distribution and inventory control 1288
Loerrach Technical Textiles. transition to computerized operation 8802
looms, jacquard. Jacomat software. CX 860 loom from Staeubli 5876
looms. advancing designs at ITMA [1987] with automation 4185
M&S International design. Personal IGOS M&S CAD/CAM System for weaving and printing and carpet manufacture 8231
Macbeth's color formulation system, OptiMatch and Color-Eye. specifications 1205
Macomber looms for handweavers 1000
Mahlo's Orthomat RFMC-9 straightener unit with FMC-9 scanning system 5324
maintenance program reduces costs at Du Pont fiber plants, improves service 7102
management information systems from different companies for apparel and textile industries 3913
management of defects and inspection machines for stretch woven fabrics. innovations shown at ITMA [1987] exhibition 7869
management of printing process with personal computer 5515
management roles in integration of the automated manufacturing environment 7889
manufacturing, computer integrated. data processing role 7150
manufacturing, computer integrated. textile mills. production planning and control 4720
manufacturing, computer integrated 5508
marketing, second generation, in textile industry 1478
mathematical model of tension state on beams 4172
Mebana's computer aided design system for apparel production, software 530
Mecmor pattern preparation for Variatex 180 TEJ and 2500 systems 8309
Mecmor Variatex 180 TEJ. electronic control. developments 5928
memory on automated footwear sewing machinery increased 723
Metap fabric and computerized design, program based on surface density 5096
microcomputer to interactively control fabric while woven. storing weaving, design information 3451
microprocessor control system for web guidance, Erhardt + Leimer's Elcom 18 unit 4721
microprocessor controlled winding and twisting. control systems for post spinning operations 6627
microprocessor-based quality and process control systems in Indian textile industry 7890
microprocessor. new uses in the textile industry 3914
microprocessors used to control fiber feed variations in carding 8147
Microscan from Beacon Controls. computer system designed to operate in hazardous areas 4713
Model 350/6 Microcolor from Pretema. laboratory dyeing machine with computer control 7602
Model 6.120 Masterblend system from Hergeth Hollingsworth. blending fiber tufts 3327
modification of CAD generated garment forms 6180
Monforts' Montex tenter with MSPS production control 3679
monitoring and data collection. Cericont system 8814
Monsanto Chemical, productivity plan includes computer integrated manufacturing. comprehensive energy balance 6333
multi-head drawframe. toothed disc roller drafting mechanism. Model SH. Sant'Andrea Novara 8161
multiprocessor control on Saurer-Allma FM-F twisting machine. features 8193
multiprocessor control system for fancy yarn twisters, from Saurer-Allma 8194
narrow fabric weaving machinery. [1987] ITMA 2583
National Retail Merchants Association's annual conference and exposition. computer and software products 2005
need for electronic data interchange between manufacturers and retailers to keep up with consumer demands 8782
network for running a small textile system 2287
nonwoven fabric manufacture. ITMA [1987] trends 5970
nonwoven fabric manufacture. ITMA [1987]. production processing technology 3496
nonwoven floppy disk liners 1423
nylon 6, polyester, cotton/polyester artificial leather, colorimetric analysis 5200
OGS/Sandoni electronic transformation with needle-needle selection for large diameter circular knitting machines 8281
Omega electronic control flat bed machines and Video-jacquard machines 8314
ordering test data on the Elektronika B3-34 microcalculator 724
organic colorants for optical disk memory 3991
overhead materials handling systems 2311
Ovitronic transformation kit for circular machines. advantages of graphic design capabilities 8311
Palm Beach Company's Access Software for electronic retailer ordering 7741
Patronik 2000 pattern preparation system from Sulzer Morat for circular knitting machines 6700
pattern development for knit fabrics, efficient use and CAD accuracy 5373
pattern preparation unit, Stoll VDU Selectanit 8289
pattern preparation unit, VDU selectanit from Stoll. computer aided 4249
pattern preparation. System 500. Jumberca 8282
pattern processing for embroidery. Saurer 2015
pattern recognition of fabric. Hough transformations 7829
patterning system, computer aided from Bonas 3940
patterning. interactive constructions of weave and color 8254
PC-based fashion systems in apparel industry. hardware and software from various companies 4512
Peomatic fancy yarn system. Jac-Art 2000 color graphics drafting system, electronic marking systems 7142
personal computers and color matching in silk print dyeing 2736
personal computers used at Macy's to step up stock replenishment in specialty stores 5425
Peyer P500 yarn clearer. yarn quality and cost effective production 7143
Pfaff sewing machinery, computer integrated 6990
Phillips-Van Heusen bar coded tag and label production system 2843
photo-optical electronic scanning system to detect missing threads beneath tufting needles by Erwin Sick 1073
pilot study of FLICS hospital linen tracking system. performance of labels, computer system 4567
planning and marketing 3915
PLC systems for control of a single unit or complete production lines 7131
Polish computerized microscope system for fiber diameter measurement 5512
printers, screen, from Zimmer 8536

printing paste kitchen from Van Wyk. free of solvents 4469
printing paste. recipes, computer generated based on standard data, accuracy questioned 5298
printing, rotation, of screens. laser production from Stork Screens 467
printing. computer aided design and production. evolution 6925
printing. new systems shown at ITMA [1987] for CAD/CIM 6856
Prodigy, Trintex's electronic information and home shopping service. service uses and future abilities 4714
product development and costs. computers versus handwork skills 3916
production control at Saic factory 6355
production control system at Hungarian Dyapjufono Wool Concern 726
production control systems. problems with cost, reliability, and user training 2288
production data processing and control. GDAQ2 from Grieb 725
production management, computer aided, in weaving. developments 5866
production preparation. automatic selection of process parameters 2294
productivity program developed by SITRA for analyzing spinning mills' productivity 7151
program based on economic model of material consumption in apparel plant 6356
program for ideal pressure between rollers and fiber to eliminate deformation 4722
projectile, rapier, jet weaving methods and machinery 6658
Prokostop 4406 computer controlled warp sheet monitoring device 8270
Quick Response and the cotton industry. Cotton Incorporated 4815
Quick Response at Federation of Clothing Designers and Executives convention 6971
Quick Response delayed by lack of participation at TALC Conference. retailers may force companies to step up implementation 5341
Quick Response for apparel manufacturers, problems with program 3688
Quick Response for United States textile industry. ATMI annual meeting 4000
Quick Response in the textile industry, pros and cons. equipment 7144
Quick Response technology and machine intelligence 7115
Quick Response, apparel manufacturers' implementation. industry reaction 5347
Quick Response, Cone Mills implements. goals and achievements to date 4715
Quick Response, electronic data information systems, and bar coding programs in retail and vendor communities. review 4517
Quick Response. direct linkages within textile, apparel, and retail complex through machinery 739
Quick Response. Electronic Data Interchange, Universal Product Code, role of Textile Apparel Linkage Council 1548
quilt designing by Jane Dadey 1511
quilt designs with images of pop idols by fiber artist Maria Ente 8674
rapier, slay, excessive force on roller. ascertainment by computer program 4196
rapier. G6100 weaving machines from Sulzer Rueti 1754
real time systems versus microcomputer generated work tickets 7152
research and data collection. uses in textile industry 6357
retailer's personal anecdotes about computer problems during ordering and delivery 2149
retailing and computers. changes in concepts 4624
Richards Sportswear, computer integration and improved efficiency in production 7726
ring spinning. ITMA [1987] developments in computer control and data access 4954
Roaches Engineering control units purchased by ICI for dyehouse control. TPC 100 and TPC 300 units 2740
robot system by Sulzer. applications in automated weaving 5037
robotics for materials transportation in mills 5497
Saint Andre International of New York implements Quick Response program in its United States yarn spinning facilities 924
Satellite Plus for real time production control at Lebanon Apparel 5516
Saurer SEMCOS Atelier/Artist embroidery design software 4533
SCARP apparel simulation system from Japan 8803
Schaeffer produces software to upgrade production, processing, and stock flow in textile finishing industry 5502
Schneider-Gerster J/HE line of electronically controlled jacquard machines for narrow fabric weaving 6856
seam tensile behavior. analysis. computer program 3128
Series 2500 negative dobby and Type 2660 positive rotary dobby looms. Staeubli 4184
sewing machinery control modules 5369
sewn products industry. prioritization for starting an integrated data processing system 6174
Sharp PC 1246 S mini pocket computer. warping and beaming 5503
Shima SDS 480 graphic system. display and memory capabilities 8804
short staple spinning machinery at [1987] ITMA 5789
silk fiber evaluation by computer 5457
simulation of production costs in three cylinder spinning mill 4728
simulation of roller abrasion, deformation, rigidity, strength, torsion, and tension 4711
six-link drive gears with aligned coupling, kinematics, program, design 5043
size measurement in full fashioned knits with a microcomputer 8794
sizing machinery. ITMA [1987]. various manufacturers 5841
sizing process. WR-M and WR-C from Sucker and Mueller 6626
sizing unit linked to cooking unit by computer. Procomat from Zell 4167
sizing, computerized monitoring of production and quality 2555
Slumbertogs' computer aided design system 3689
sock boarding machine, TF-96 from Firsan 3722
software by CIM Textil Computer at Verse-Blusen apparel firm 6979
software combined with electronics at ITMA [1987]. dyeing, weaving, knitting, yarn production machinery. CAD 4723
software for choosing protective clothing fabrics 6757
Softwear Swimwear Incorporated's custom design swimwear with the aid of computer design. products, styles, fabrics 3690
soil counting system, computerized, at Shasta Linen Supply. annual cost savings 4584
sonic digitizer technique to measure medullation in mohair 8687
Soviet weaving industry. automation and computer use 5025
spandex blends, structure studied by computerized method 6279
SPC computer software for business management rationalization, tracing corporate development 4709
SPC weighing systems by Booth Electrosystems (Conf. Paper) 8760
spinning and weaving mills. applications for computer integrated manufacturing 6329
spinning balloon equations. wide amplitude balloon theory 151
spinning mill production costs through computer simulation 3917
spinning operations, materials flow analyzed in worsted mills 8758
spinning, computer aided production. new systems shown at [1987] ITMA 6581
spinning. ITMA [1987]. automation and information systems 5757
Spriano's Tosdisc 211D for control of steaming parameters in printing 6933
ST range from Cobble Blackburn. programmable sliding needle bar drive for patterning carpets 5103
Staeubli Programming System 18 for dobbies and card cutting machines. portable programming device 18-58 II 8809
Staeubli Programming System 18 for dobbies and card cutting machines 8805 8807
Staeubli Programming System 18 for the dobby 2500 and 2600 Series 8806
Staeubli Programming System 19 for Jacquard machines. Jacomat

software 8808
Staeubli's Excenter, dobby, jacquard sheds. computer control 197
Staeubli's programming system 18 and card cutting machine type 1866. pattern cards for dobbies 4201
standards in computer integrated manufacturing called for at Textile and Apparel Machinery Modernization Foundation 6358
Stoll computer controlled CMS Selectanit flat machines 8318
Stork Total Systems Control for wet processors 3121
Sucker and Mueller's warp preparation system. reasons for investment in a system 7878
Sycotex System. computer integrated manufacturing system developed by Barco Industries (Trade Lit.) 8810
systems for CAD in knitwear industry at [1987] ITMA 3131
TALC, labor-saving devices. computer and lasers to identify fabric roll shipments for correct color and style 2279
TAMMF conference, factory computer communications standards 5588
tapestry design. Pointcarre CAD for weaving. works by Olivier Masson and Bernard Aujogue 4635
technological advances at ATME-I [1988]. Picanol, Sulzer Rueti, Pignone 5089
Teijin. program for simulating perspiration 7345
telecommunication network. use in transmitting results of measurement 6934
Telematic Textile Service. IBM compatible network communication system 7886
tensile strength, microprocessor measurement 7068
tentering. automation and quality control 5335
testing flocked/nonwovens' strength, influences in model 5120
testing needle-key zone load in circular knitting 7159
Texdata laboratory data processing evaluation software 3122
Textile and Apparel Machinery Modernization Foundation (TAMMF). formed to create standards for factory computer communications 3990
Textile and Apparel Machinery Modernization Foundation, initial project computer communications 1557
textile design. ITMA [1987] discussion of computer systems 2305
textile factories of the future. computer systems managing production. customer orders basis for production planning 3918
textile industry, computers for fiber blending, spinning, monitoring systems 8815
textile machinery, mills heading toward full automation. industry executives share their views 5510
textile machinery. developments in computerized equipment 727
textile mill. installation of computerized information system 7153
textile mills, computer applications, WestPoint Pepperell, Avondale Mills, Swift Textiles. production control, inventory control 5509
textile operations and computer archiving and networking 3191
texturing machinery, false twist and air. [1987] ITMA 4960
Texunion DMC. computerized weaving, spinning, dyeing operations. robotics for materials handling 5504
Then-Uniflow from Then. compact jet dyeing machine with Then-Datacomp control computer 5239
thermal insulation of apparel fabric, mathematical model 5124
third Software Market organized by IBM. software available for IBM systems 7885
three dimensional CAD by Gould and Sophis Italia. capabilities if developed 7892
ticketing manufacturers taking EDI to Far East and Western Europe. Quick Response 4724
Touche Ross/Bobbin survey of software for apparel managers 6173
tricot and raschel machines. developments in electronics for knitting. increased flexibility and productivity 7424
Trip-Lite's Sock-Feed System with ITF Yarn Feeder and Thetis programmable transmission system 4246
Truetzschler's cards-information system for monitoring Model DK 740 cards 3328
tufting machinery at ITMA [1987] 4298
twisting machinery at ITMA [1987] 4127
twisting. effects on other processing factors. computerized determination 4947
type S-D 400SE rigid rapier looms from Saurer-Diederichs 6660
Universal CAD/CAM design station for flat knitting pattern development 7433
use of bar codes in department and specialty stores. majority of those polled committed to use within eighteen months 8781
used to determine tear load, width, surface density parameters for new woven wool fabrics 4179
Uster Sliverdata. use of new trends in online quality control monitoring 7879
V-bed flat. personal computer aided design and preparation 1781
Valstar installs production control at Don and Low. fabric producer 5505
Variatex machines for electronic jacquard transfer by Mec-Mor. descriptions 7427
variations in synthetic fabric lengths. compensation by automatic cutting control systems 6184
VDU Selectanit for CAD in flat knitting machinery. new design capabilities 7145
VH-Color Magic color measuring system from Vald. Henriksen 7578
VH-Microdos dosing system, computer controlled, manufactured by Henriksen 8440
Viascan system for producing and processing color patterns for jacquard weaving. Viable Systems 8252
video display terminals. health hazards associated. awareness campaign mounted by ILGWU 8848
VPZ control system for transportation of textiles, computers 4731
warping machine, Supertronic cone sectional from Benninger 6633
warping machinery, interweaving warp threads in selvages. computerized control 1767
water jet systems, ISIN and Cyberg, for cutting leather. features and architecture 2845
wave propagation features in composites for oblique angles of incidence 6316
weaving industry (Trade Lit.) 8816
weaving industry. data collection, production line applications 728
weaving mill. effects of different parameters on costs. computer-assisted simulation 2241
weaving mill. production planning, machine control 732
weaving mills, microprocessors, unidirectional communication at Graniteville Company, Woodwill Mills 5009
weaving plant Artificial Intelligence. Realtex-PAT, Realtex-GTM, PAT-Expert, GTM-Expert systems from Picanol 4725
weaving production monitoring system 2289
weaving. artificial intelligence (Trade Lit.) 8817
weaving. future 5867
weft insertion. computer aided. new machines by Karl Mayer 6648
weft knitting. prediction without samples 5912
winding mechanism for wound-filament reinforcement members 8232
wire cloth trapped in polymer material for barrier to electro-magnetic radiation in computers and microwave antennas 8409
women's apparel design improved as a result of computer analysis of consumer data 4603
wool, unscoured, measurement using TEAM computer program used in Poland 661
woven fabric planning and CAD/CAM. new economics of design 3428
WRONZ Soft Flo microprocessor system. to overcome effects of dyeing at high liquor flow pressure 5203
yarn count conversion program, Turbo Pascal 2290
yarn diameter measurement detector. data transferred to central computer for quality analysis (Trade Lit.) 8183
yarn package inspection and handling 8189
yarn production, filament and novelty. ITMA [1987] 5801
ZSK-Stickmaschinen Gesellschaft. machine control systems 540

CONDENSING, SEE CARDING MACHINERY, DRAFTING MACHINERY.

CONDITIONING (SEE ALSO OTHER HEADINGS, SUCH AS

DECATING, FINISHING MACHINERY, MOISTURE PHENOMENA, STEAMING)
acrylics. Hacoba HB-2000 continuous yarn shrinking and bulking system 2532
Quick Response strategies important for textile industry according to experts at ATMI 3998
unoriented polyamide yarns. treatment conditions and molecular structure 4957

CONDUCTIVE FIBERS, SEE EPITROPIC FIBERS.

CONES, SEE WINDING MACHINERY, YARN PACKAGES.

CONFERENCES (SEE ALSO OTHER HEADINGS, SUCH AS EXHIBITIONS, AND UNDER HEADINGS SUCH AS COTTON, DYEING, FINISHING, FABRICS, ETC.)
AAMA seminar held in New York to discuss benefits of Quick Response system for retailers 8780
AAMA. Du Pont executive urges investment in technology 4509
AAMA. Quick Response, electronic information systems, Apparel Research Committee 4517
AATCC conference and exhibition highlights. dyeing, printing, shade quality 379
AATCC printing symposium review. automation stressed 7563
ACIT at Rouen, 55th. examination of exhaustion dyeing and developments 6099
ACIT conference. role of enzymes in desizing 6091
AIM show, Northeast area. technology products and issues affecting apparel producers. bar coding 5343
American Chemical Society National Meeting [196th]. abstracts 7271 7275 7281 7282 7283 7294 7305 7306 7311 7326 7331 7332 7338 7350 7384 7389 7391 7392 7395 7476 7480 7488 7492 7499 7500 7501 7505 7508 7515 7538 7541 7542 7543 7554 7610 7611 7613 7615 7618 7619 7620 7624 7626 7630 7631 7639 7640 7642 7646 7795 7905 7906 7907 7908 7909 7910 7911 7912 7914 7915 7921 7932 7955 7956
American Society of Knitting Technologists. circular yardgoods 1136
Annual CMA Seminar, modular manufacturing. modular cutting in Joseph and Feiss plant 5370
Annual meeting of M-MF Producers brought changed name and new chairman 8962
apparel manufacturers attend workshop to learn about new OSHA formaldehyde standard 4757
Apparel Research Conference in Atlanta. need for industry technical professionals 8759
ASKT. plush fabrics production into fashion [1987] 6675
ATMI urges members toward Quick Response to keep United States textile industry on top of global textile scene 3998
Auburn University Textile Slashing Short Course. [1987] proceedings 1740
BIMA [1988] Conference, proposed draft code of practice for fabric/interlining relationships 4986
Biology of Wool and Hair conference. genetic engineering 6478
Black Sheep Gathering. colored wool outlook 7285
British Interlining Manufacturers Association conference, code of practice. compatibility between interlining and outer cloth 5133
carpet sales and direct mill sales to retailers. market changes affecting floor covering industry 3020
CIM in textile manufacturing. topics of the First Reutlingen Textile Management Colloquium 3908
CINTT [1986]. future of weaving 5867
CINTT [1986]. interest in conventional spinning 5753
Clemson conference on in-house extrusion of synthetic fibers. use in compact spinning systems 2464
Clothing Manufacturers of America seminar. modular manufacturing at J & F discussed 5352
Combined Sixth International and Second European Conference on Composite Materials. polymer-matrix and metal-matrix composites 3983
computer science and textiles. conference sponsored by the Italian Assoc. of Cotton Manufacturers 7880
Conference, Twenty-ninth Technological. BTRA, SITRA, ATIRA, and NITRA 7265
consumer study reveals widespread dissatisfaction with highloft nonwoven products 3547
Cotton Economics and Marketing Conference. [1988] Beltwide Cotton Production Research Conferences 6432 6436 6451 6456 6459 7217 7218 7220 7221 7222 7223
Cotton Engineering - Systems Conference. [1988] Beltwide Cotton Production Research Conferences 6434 6442 6448 6453
Cotton Ginning Conference. [1988] Beltwide Cotton Production Research Conferences 6435 6438 6441 6443 6445 6449 6457 6458 7050 7193
Cotton Improvement Conference. [1988] Beltwide Cotton Production Research Conferences 6433 6447 6450 7055
CSIRO symposium [1986]. washing and carding of wool. papers presented 7367
detergents and the environment, study. [November 1987] in Bergamo 5545
dry-forming, meltblown, thermal bonding, and ultrasonic technologies discussed at Edana's Nordic Symposium 5146
Du Pont's Annual Industry Forum [6th]. assessment of Quick Response system 8779
Du Pont's Annual Industry Forum [6th]. vertical market improvements 8924
Dyer's [1988]. West German Dyer's Convention previewed 6830
EDANA Nordic Nonwovens Symposium [1988]. technology, fibers, markets. superabsorbent polymers 6621
Eighth Forum for Process Technology in Textile Finishing. importance of overall textile appearance 7242
electronic home shopping seminar. Telaction, Trintex systems 5427
electronic shopping, caution urged for retailers and manufacturers 5428
Electronics in Textiles conference. more towards intelligent manufacturing systems needed 3200
Electronics in Textiles conference. quality control in manufacturing machinery 3117
Endotoxin Inhalation Workshop [1987]. cotton dust and byssinosis studies 8964
FETANOR. examination of initiatives in France for quality management 6390
FIACTC. effect of polymers on colorfastness 6324
Fifth International Symposium on Drying [1986], proceedings. papers 7961 7962
Fifth International Symposium on Drying [1986], proceedings. supplemental papers 7960
Financial Times International Conference. future of world textiles 699
Finishing Industry, West German, met in Cologne [December 1987]. topics discussed 6832
Forum for Textile Finishing Processing Technology. fabric inspection optics 6092
Fourth International Conference on Composite Structures, conference papers 3984
Fourth International Conference on Polypropylene Fibers and Textiles 74
Fourth International Textile Conference in India. textile trends 7259
Fourth Textile-Apparel Dialog forum for problems between textile and apparel industries 3986
garment dyeing and Quick Response system discussed at Clemson University seminar 3595
Garment Dyeing Conference at North Carolina State University 408
garment dyeing industry in United States, possible shake-out 3594
garment dyeing. NCSU conference report 1206
Greenville Fiber Producer Conference. attendance, products, technology, seminars 6426
Hof Nonwovens Seminar [1987]. highlights 3495
Hong Kong's economy, economic indicators, control-center roles. symposium attended by Japanese trading company subsidiaries 3165
IACD increased prices and demand for wool and Australian shortages 4827
IDEA [1986]. fiber grade polyethylene resins 4033

IMB. progress in drawing-in technology. trend toward pragmatism 6975
IMPACT [1987]. nonwovens packaging, spinning, coloring 1054
IMPACT [1988], three papers presented on Catlux, acrylic fibers, and gel spun polyethylene 5642
INDA-TEC sponsored by Association of Nonwoven Fabric Industry 1055
INDEX [1987] Congress Papers. Session A0. Mastering Change 1133 1153
INDEX [1987] Congress papers. Session A1. Fibers 61
INDEX [1987] Congress papers. Session A2. Bonding Agents 45
INDEX [1987] Congress Papers. Session A3. Web Making 927 1151 1156 1159 1161
INDEX [1987] Congress papers. Session A4. Web Making 285
INDEX [1987] Congress Papers. Session A5. New Ideas 1162
INDEX [1987] Congress Papers. Session B1. Gas Filtration 1098 1100 1101 1103 1105
INDEX [1987] Congress Papers. Session B2. Apparel Technology 1041 1138 1139 1140 1279 1456
INDEX [1987] Congress papers. Session B3. Roofing 361
INDEX [1987] Congress papers. Session B4. Agriculture 360
INDEX [1987] Congress papers. Session C1. Hygiene Problems 295
INDEX [1987] Congress Papers. Session C2. Hygiene Solutions 294
INDEX [1987] Congress Papers. Session C3. Medical 1106 1109 1112 1114 1116 1117
INDEX [1987] Congress Papers. Session C4. Medical 1107 1108 1110 1113 1115
INDEX [1987] Congress Papers 46 47 59 64 67 73 84 100 286 287 291 296 297 299 300 329 330 331 332 343 344 345 346 347 348 349 350 351 352 353 354 355 364 591 592 593 594 674 793 1042 1043 1044 1075 1148 1165 1166 1168
Industrial Fabrics Association's convention. nonwovens in geotextiles 5995
International Conference on Analytical and Testing Methodologies for Design and Advanced Materials, conference papers 3985
International Cotton Conference papers, price, production, consumption, stock. projection discrepancies 4816
International Cotton Conference [1988] highlights. cotton fiber and yarn testing methods 4808
International Cotton Conference [1986], Bremen 6401
International Nonwovens Technological Conference [1987] 5972
International Nonwovens Technological Conference [1988] 5971
Italian Clothing Technicians, twenty-first convention, robots, advanced stitching machinery. Japanese manufacture 2387
ITMA [1987]. general overview. listing of Italian exhibitors 5587
ITMF Congress, [November 1987]. New Delhi. manmade fibers and world trade 7943
ITMF [1987]. Annual Conference highlights 6409
ITMF [1987]. current technology, trends in weaving automation. weaving in the year [2000]. future trends 5893
ITMF [1987]. history and current state of mill, power loom, and hand loom sectors in India 6405
ITMF [1987]. industry trends. changes forecast for the year [2000]. production shifts to developing countries 6411
ITMF [1987]. major developments, EC focus. factors in development of world's textile markets in late [1990's] 6410
ITMF [1987]. spinning and weaving mills. applications for computer integrated manufacturing 6329
ITMF [1987]. spinning innovations. mills in the year [2000]. trends 5774
jet dyeing seminar at Clemson University 8475
Joint meeting. Cotton Engineering Systems & Cotton Ginning Conferences. [1988] Beltwide Cotton Production Research Conferences 6439 6440 6444 6446 6452 6454 6455 7051 7052
Loughborough University papers summarized. air jet texturing 1711
manmade fibers in knitting. papers on various topics 5913
Menswear Retailers of America Convention. sportswear growth in specialty stores 2921
Mintel Lifestyle Consumer Conference. British teenager consumer attitudes, advice to marketing managers 6236
National Retail Merchants Association [1987]. annual conference-exposition, computer and software products 2005
Natural Dye Research, Sixth Annual Meeting. highlights 2766
New Technologies, New Strategies for Apparel Manufacturing and Management, Third. Clemson. Quick Response 2810
nonwoven bonding methods. seminar at Haus der Technik in Essen 8330
Nonwovens Conference, Brno, Czechoslovakia, twentieth annual hygienic and geotechnical fabrics 3987
nonwovens in healthcare and medical textiles 2388
Nonwovens in Medical and Healthcare Applications sponsored by Pira 1155
Nordic Nonwovens Symposium. summary of papers 8329
NRMA conference experts warn retailers to start electronic data interchange program slowly. distribution, inventory control 7026
Pitti Uomo Italia, designs and fabrics for men from Italian designers. show theme, styles 2094
Plastics and Rubber Institute's polypropylene applications conference 75
Plenary Meeting of International Cotton Advisory Committee 819
Polyester Textiles. Papers Presented at a Shirley Conference [May 17/18, 1988] 8939
polymers. high tech applications 6540
Polypropylene Textile and Fibers conference highlights 2477
polypropylene. uses beyond sports and outdoor wear. yarn production, properties 2479
Proceedings. Fiber Producer Conference [1988]. Clemson University 8033 8034 8035 8036 8037 8038 8039 8139 8174 8375 8633 8678 8707 8708 8760 8761 8762 8763 8764 8765 8849 8850 8851 8925 8961 8963
Quick Response at Federation of Clothing Designers and Executives convention 6971
Quick Response program for United States textile industry. ATMI meeting 4000
Quick Response, needed in apparel manufacture, press conference held by Dillard department stores 5347
Quick Response, papers summarized. symposium hosted by Society of Dyers and Colourists 1512
Reutlingen Textile Management Seminar highlights. data processing systems. CIM textile applications 6353
rollers and roller coatings for the textile industry 4752
SAMPE. Materials--Pathway to Future 4301
second conference on the Dyeing of Clothing at University of North Carolina, developments 6105
Second World Conference on Detergents. growth in recent years 7105
selections from International Conference on World Textiles [into 1990's] 3152
Shirley Institute conference. British Standard BS2747:1986, imminent changes in care labels 578
Shirley Institute conference. Nightwear and Fire 1542
Shirley Institute's conference on polyester textiles, papers 6534
sixth knitting congress. ability of rectilinear machines to produce fashioned articles 5900
sizing process. techniques, costs 4160
Society of Dyers and Colorists symposium, wet processing innovations 5312
Special Session. HVI Measurements of Fiber Quality. [1988] Beltwide Cotton Production Research Conferences 7047 7048 7049 7053 7054 7056 7057 7154 7219
spinning conference sponsored by Lenzing and Schlafhorst. rotor spinning and fine fibers 6590
standards in computer integrated manufacturing called for at Textile and Apparel Machinery Modernization Foundation 6358
summaries of papers in colorimetry given at A. Volta conference [December 1987] 6852
surfactants. environmental and health problems 6376
Swiss textile machinery associations post-ITMA meeting. machine, apparel industry impact of new circular knitting machines 7963
symposium for impact testing of plastics, composites. research papers 7243
symposium on new approaches to wool scouring. results of CSIRO

trials 4413
Symposium on Polymers for Advanced Technologies. conductive, piezoelectric, and high performance materials 8040
TALC conference. lack of participation from apparel firms. Quick Response suffers 5341
TAMMF conference, factory computer communications standards 5588
techniques of spectroscopy and analysis. proceedings of symposium on analytical applications of spectroscopy 7099
Techtextil [1987]. observations 8417
tenth SVCC symposium. automation and new technologies in dyeing and finishing 5216
Textile Assoc. of Como. introduction of Telematic Textile Service communications network 7886
Textile Education for Contract Specifiers. product liability. New York State code 7251
textile education. problems, solutions for future training programs 6418
Textile Institute Conference [May 1987]. Textile Product Design and Marketing. highlights 1495
Textile Institute's [1988] Annual World Conference. review of some papers presented 7964
Textile Processing. Prospects and Retrospect. Bombay seminar. papers 7319
Third International Geotextile Congress [1986], proceedings 7965
TIFCON [1987] Report. Textile Institute Textile Floorcoverings Group 1424
Twenty-First Canadian Textile Seminar International. summaries of papers 5589
UMIST [1988] nonwovens conference. papers 7473
United States and China promote general communication and trade 8957
VDF/VTCC and Gesamttextil meetings. unproven, revolutionary productivity advances at [1987] ITMA 7966
Verein Deutscher Ingenieure Textile and Clothing Group 8827

CONSERVATION, SEE AIR POLLUTION, ENERGY, ENVIRONMENT, LEGISLATION, MILL BUILDINGS, WASTE TREATMENT--EFFLUENT, WATER.

CONSTRUCTION, SEE MILL BUILDINGS.

CONSTRUCTION OF FABRIC, SEE FABRIC DESIGN, FABRIC GEOMETRY.

CONSUMER ATTITUDES (SEE ALSO OTHER HEADINGS, SUCH AS COMFORT, FABRIC QUALITY, FLAMMABILITY, HOME FURNISHINGS, INDUSTRIAL HEALTH AND SAFETY, LABELING, LEGISLATION, METRICATION)
adult incontinence pads. market analysis 1363
Anne Klein II sportswear line. targeting niche consumer and promoting line 1384
apparel serviceability, labeling, and care instructions 1309
apparel. male university students attitudes toward fashion, purchasing 7013
bedding, increased demand for natural fibers 649
bedding. popularity of duvets, down comforters 3019
booming United Kingdom sportswear industry 2153
buying patterns. fashion apparel 1356
carpet consumers, description, income, needs, preferences 644
carpet. styling changes, interior decorating 2160
children's wear. marketing. industry responses 603
clothing structure/appearance features. inferred personality traits 8634
color preference. people and commodities relationship now and in future 500
color trends [1988-1989]. factors influencing consumer preference 1200
complaints, effective handling by launderer and drycleaner 3876
computer analysis improves design of women's apparel 4603
consumer dissatisfaction with garment fit. coping mechanisms 5418
consumer protection measures in India. consumer awareness and attitudes 3960
cotton apparel. effect of baby boomers attitude on market share 2416
cotton consumption 819
cotton, United States cotton market share jumps two percent. consumer demand driving force 7274
cotton. consumption increases. continued market share gains for cotton 7218
customer types identified by Management Horizons for apparel retailers 2984
delicate window coverings. consumer demand drives up sales 6257
demand for higher quality cotton products, corresponding need for better processing 8157
denim for jeans. testing consumer preference to determine ideal parameters 7812
department stores. effect of mergers, consolidations on consumer's buying habits. industry executives predict no change 2985
England. current trends in men's wear 2134
fabric choices by female college students for apparel 2940
fallacies about effect of synthetic fibers on skin 3274
Fashion Center's [spring/summer 1988] line, consumer reaction questionnaire 5412
fashion. demographics and advertising 1277
fashion. diffusion theory 1372
female personality judged by appearance 8629
fine wool priced higher than coarse wool due to consumer demand for worsted fabrics 1628
garment fit 3772
home furnishings. luxurious natural fiber products in demand 6260
Hong Kong. fashion retailing difficulty with establishing consumer profiles 2977
hosiery. cautious retail climate necessitates using colors, patterns to lure consumers 2871
impact on jersey knitting industry in United Kingdom 5047
incontinence. circumstances making it difficult for consumers to get assistance or products 594
influence on Italian intimate apparel industry. growth. product innovation 7723
interest growing in cotton and spandex hose. effect on mills 6403
interior design and product display in stores. attracting customers 1498
jeans sales soft in spite of fashion finishes 1383
jeans. resurgence in consumer demand due to new finishing techniques 1374
kimono collar effect on skin color 8725
Kiwi jeans, offers finger size pocket to hold condoms, safe sex marketing campaign 5405
Mintel report on teenage consumer, attitudes toward clothes. advice to capture market 6236
pants size standards 5361
polyester filament. performance and new esthetics counter negative image 8213
polyester/cotton blend yarns. comparison of blending before carding and before draw-framing 8146
product design directly related to general cultural perceptions 1490
Quick Response technology at J. C. Penney 716
R. H. Bruskin Associates study of American adult apparel purchasing preferences and findings 2953
reclaimed wool industry in England hurt by dollar and consumer demand for lightweight wool 1623
review of consumer studies. buying behavior, advertisements, brand names 1585
salesman's role in consumer selection of fabric 1425
satisfaction with purchases. study of post-purchase attitudes 7967
Shopping, Prodigy, Trintex's electronic information and home shopping service. service uses and future abilities 4714
studies on consumer behavior, demand preferences, advertisements, post purchase feelings 8635
study reveals widespread consumer dissatisfaction with highloft nonwoven products 3547

suit, fashion. probe sponsored by Clothing Manufacturers Association of America found to be widely accepted. other study findings 622
survey method to improve apparel design procedures 5406
survey of how women pick out their underpants every morning. influential factors 2106
tactile test promotion by the Polyester Council to improve image of polyester fabrics 6071
target marketing in dispersion retailing 1278
testing, asbestos in ambient air determined by microscopy methods 3066
trend toward sports/casual men's wear concept in Great Britain 8623
underwear, women's preferences in panty styles and fabrics. buying habits 8636
United States made apparel preferred in survey of United States adults 5590
weather and shopping relationship revealed by statistical study 5591
work apparel and leisure apparel market. conceptions of the near future 3981

CONSUMER HEALTH AND SAFETY (SEE ALSO OTHER HEADINGS, SUCH AS HEALTHCARE AND MEDICAL TEXTILES)
AAMA urges government intervention to stop sales of cotton playwear as children's sleepwear 5409
asbestos. removal as health hazard. building owners affected by EPA emergency act 4804
ATMI's argument with California to exempt textiles with formaldehyde from having consumer warning label 2326
carcinogen warning labels in California fuels formaldehyde controversy 6234
carpets, electrostatic propensity, safety margin 5472
carpets. radiant panel smoke emission tests 8705
combustibility testing and smoke production dynamics 693
combustible construction materials in buildings. Switzerland 763
combustion standards. test methods. legal regulations 691
continuous roll towels, potential risks. safety recommendations 6377
diapers, disposable and cloth. diaper rash 6034
drycleaning solvents and vapors may result in neurological damage with symptoms similar to Alzheimer's disease 1538
flame and fire protection. British and international standards 1544
flame retardant home textiles. testing at EMPA St. Gallen 692
flammability of sixty apparel fabrics 4361
floor coverings and health considerations, harboring microorganisms and fungi 2172
formaldehyde, OSHA standard. industry reaction to cancer warning labels on fabrics and apparel 3955
identification of bacterial type on raw cotton fiber 8852
polyurethane foam. question of banning because of flammability 3804
sleepwear. port inspection program. to intercept illegally imported Consumer Product Safety Commission 5419
toxicological testing of manmade fibers, standards, methods, classification 4657
Tris-BP reported as a potential hazard. dermatological effects of treated fabrics. cellulosic fabrics 6941
waste treatment, effluent. decolorization. flocculation 7200
waste treatment, effluent. guidelines for pollution control 7201
Wira Technology Group/IWS beater sampler for bacterial content evaluation of carpets 7204
workwear rental companies provide laundering service, improved clothing hygiene 8914

CONVERTERS, SEE TOW PROCESSING.

COPOLYMERS AND COPOLYMERIZATION
acrylic and methacrylic acids grafted on polyethylene terephthalate 1658
acrylonitrile and 5-vinyl-2-methyl pyridine. modified chemisorptive fibers 8042
Allied Fiber's block copolymer nylon, Hydrofil, in high performance socks 3259
blend fibers. kinetics and mechanism of alkaline hydrolysis 8108
caprolactone and glycolide/lactide. new properties for absorbable surgical products 7355
Celanese copolyester. flow instabilities 5707
Chinon. dissolution of casein component by protease enzymes 8129
cotton graft copolymers. hypochlorite oxidation 2223
description and characteristics of copolymers for textile finishing 6500
developments in oriented polymer, properties, and spinning behavior 6541
dyeing cotton-PMAA graft copolymer. results in terms of color strength 6873
epoxy resins for stress-free high performance composites 4320
fibrid formation of polyetherurethane for artificial leather production, copolymerization, properties 4052
fluorine-containing copolymer based fibers. physicomechanical properties 7334
glycolide and trimethylene carbonate random copolymer. bioabsorbable suture coating 8559
graft copolymers of polycaproamide and polydiethylaminoethyl methacrylate. optimum processing parameters 48
grafted cotton yarn initiated with ammonium sulfate. tensile strength and percent extension 49
grafting of polycaproamide and polymethacrylic acid 7312
high modulus aramid copolymers. structure and thermomechanical properties 1650
high modulus aramid copolymers. ultrasonic and crystallite moduli as function of temperature 2457
highly modified copolymers. possible applications 7313
hollow fibers. microvoid development from alkaline hydrolysis 8110
J-2 amorphous polyamide copolymer. thermoplastic matrix for high performance composites 4305
liquid-crystalline copolyesters. X-ray diffraction 879
melt-blown webs. ethylene copolymers evaluated for stretch recovery 4287
MicroPore develops waterproof, breathable fabric with Kynar Flex 2800 film 6721
nylon 66 copolyamides of bis(2-carboxyethyl)methyl phosphine oxide 880
overview of modern polymer sciences 7206
poly(oxytetramethylene) aramid block copolymers. solubility. thermal behavior 5659
polyester copolymer modification for structural, batting purposes 8043
polyester. flame retardancy through polymethacrylic acid 6523
polymer dispersion products from Hoechst for multiple applications 2788
polyvinyl alcohol and acrylonitrile. fiber extrusion 8061
polyvinyl alcohol. copolymers for different versions of original uses 4165
radical induction for copolymeric grafting through radiation 3666
reactive high polymers and copolymers 8542
reactive high polymers. chemical and mechanical properties 5179
rigid and flexible macromolecules, process 3298
TFE CP. crosslinking effects on thermo-mechanical properties 8041
tough, high molecular weight, formaldehyde-free copolymer lattices 84
Trevira CS polyester and flame retardant carboxyphosphinic acid 8052
vinyl monomer binary mixtures for synthesizing cellulose graft copolymers 7314

CORDAGE (SEE ALSO OTHER HEADINGS, SUCH AS ROPE, TIRE CORD)
racquet string for oversized racquets. pseudo-core 8205
wet abrasion cordage from nylon, polyester, and polyolefin finishes. aqueous cordage aqueous over-finish for protection

2537
wire tethers for use in space 2539
Yutaka Anzai string for racquets. stringed instruments 1724

CORDUROY, SEE PILE FABRICS.

CORE SPUN SPANDEX, SEE CORE YARNS.

CORE YARNS (SEE ALSO OTHER HEADINGS, SUCH AS SPINNING)
air jet, PF-2R spinner. stress on core during nylon and polyester spinning 137
cotton fabrics, strength increased with core yarns 7391
Danaklon. production of bicomponent and polypropylene fibers for nonwovens industry 8097
Du Pont's Lycra, apparel, knitting, core yarns for weaving, products from Poland 4887
nylon core yarns affected by sheath fiber denier, twist, dyeing treatment 976
nylon-viscose yarns characteristics. effect of sheath and core factors 3388
nylon/paper yarn packs for wool by CSIRO 4069
performance in apparel and household and industrial textiles 1726
PF-R rotor spinner with sensor for core control during core yarn production 143
racquet string for oversized racquets. pseudo-core 8205
ring spun staple yarns. calculation of idle zone 4977
Rotona core yarns. modified rotor spinning system 8188
roving, PAT-M/300 core spun, for flame retardant PVC conveyor tapes 2200
single and two-ply core spun yarns. properties 1717
structure correlated to tensile properties 7376
woven fabric of core yarn for wrapping vee belts 1773

COSTS (SEE ALSO OTHER HEADINGS, SUCH AS MANAGEMENT, POWER CONSUMPTION, QUALITY CONTROL)
a-c motor controls with centrifugal fans and pumps. methods 7244
accounting, internal profit and loss and standard cost 8771
air flow configurations used in melt-blown process 4278
air jet, friction, and open end rotor technologies 5779
analysis of geotextile material options for project cost control 7780
apparel manufacture pricing and costing process. making sure of gross profits 7679
Australian textile industry, energy as controllable cost 3928
Australian wool. cost of harvesting, marketing, and distribution 6485
automated systems from Ivanovo SKB SM, abilities 5523
automation. process costs determine installation 4712
batch tunnel washer and washer extractor compared for operating costs 4595
continuous dyeing. optimizing efficiency of short batches 5248
cost breakdowns for manufacturers. impact of program size on selling price 6168
cutting operations 3097
diapers. private labels versus national brands 1357
draw-sizing compared with warp-drawing. quality and costs 8237
dyeing costs. possibilities for reduction without compromising quality 7583
dyeing, cotton and cellulosic knitted materials, reduction of dyestuff consumption 7627
dyeing, exhaust. reduced costs. technical advances 437
dyeing, vat and union, using vacuum extraction process on cotton/polyester fabrics 439
electricity, various needs in industry 1729
energy conservation, flow chart value analysis 3900
energy reduction, modernization of tentering machinery, resultant savings 4506
estimation of costs in complex manufacturing situations 6336
finishing. increase due higher levels of sophistication. developments at ITMA [1987] exhibition 6082
Fratelli Marzoli's Model PX1 combing machine reduces processing costs and power consumption 5735
garment dyeing, cost justification 1194
garment dyeing. advantages. costs savings 6864
global textile cost comparisons, viability of textile manufacture in high labor cost areas 3153
Graniteville's Gregg dyehouse. computer control and monitoring of processes 2743
heat recovery systems. performance review and assessment. reducing energy costs 7895
high performance fibers. processing, structure, properties, and end uses 4048
Hungarian conservation methods, energy, materials, with new machinery 4746
Hungary, conservation, effects, changes 4019
Hungary, new economic conservation methods, effects, structure 4697
impact of winding drums 5861
India. necessity of improvement for survival of mills. prospects 4925
India. nylon 6 production cheaper than nylon 66 production 5694
inventory cost standards for spinning mills 8819
investment in computer warp preparation system as compared to traditional manual system 7878
investment return in a cotton spinning mill. optimal management for optimal results 7111
Job Change Incentive management strategy resulting from Quick Response technology 3877
job costs in marine products industry 8772
Just in Time strategy for improvement of industrial investment 7110
Kiss-Roll or Triatex MA system. application in India 6084
knit fabric finishing 8766
labor costs compared between several countries 2274
laboratory software. evaluation 3912
manufacturing offshore. pitfalls for United States companies 8770
Martin Worldwide's Model 6000 Bobbin Stripping Machine. salvage of waste yarn without bobbin damage 2299
material consumption and waste reduction techniques at the Lakashtextile Concern in Hungary 209
material, energy conservation, Hungarian knitting mills, changes 4263
model for quality achievement. need for both improved quality and low cost 7169
nylon. rising prices. effect on Indian industry 2403
polyester production. mill restructuring, technology 8749
product development and costs. computers versus handwork skills 3916
production costs for woolen garment manufacture by rural Indians in Bharmaur 5496
production costs, computer simulation. three cylinder mill 4728
production. regional patterns and shifts in cotton acreage, production, and profits in United States 6432
productivity and innovation 8774
quality control in apparel manufacture 3898
radio frequency energy for drying sized yarns of polyester/cotton 8564
raw materials. knitting. savings for greater profits 7112
recycling heat energy from wool drying procedures, cost reduction in wool mills 4734
reduction of combi-twisting costs with the hollow tube Hamel [2000] 8192
reduction overall costs. dyeing procedures, approaches to active savings 3596
reduction with quality improvements through CIM. possibilities 7138
reduction. Courtelle open end neochrome fibers. advantages 5662
restructuring of costing, cost accounting, and profit-and-loss statements in textile plant management 3894
Rucogen NZA developed by Rudolf to remove non-fixated hydrolyzed dyes 5160
salary increases for sewing mill personnel, effects on costs and production 704
socks. manufacture. high cost caused by number of manual

operations 6684
Spandex swimming apparel, production analysis 703
spinning mill production costs through computer simulation 3917
spinning, open end. study of friction and drafts. comparative cost analysis of various systems 2512
Tennessee Woolen Mills. blanket collections compete with European designs 3017
tenter dryers. cost analysis of new and old models 8568
textile finishing. economic challenges in last twenty years. solutions 6813
textile machinery. Spanish import and export. cost in pesetas 3147
vertical versus horizontal dyeing and drying installations 3866
waste treatment, dioxide molecular neutralization process for alkaline waste water from cotton finishing 4763
wastewater treatment. finishing processes. costs of water recycling 3957
weaving mill. effects of different parameters on costs. computer-assisted simulation 2241
weaving. international comparison. United States, Europe and India 5036
weaving. measurements of efficiency for evaluation of costs 6366
weaving. study of materials and energy involved in production 5892
wet processing. conserving energy 7555
wool. [1987] Australian wool cost estimates 3236

COTTON (SEE ALSO OTHER HEADINGS, SUCH AS CELLULOSE, CHEMICAL MODIFICATION, BALING, BATTING, DETERIORATION OF MATERIALS, FIBER-YARN-FABRIC RELATIONSHIPS, MOISTURE PHENOMENA, AND UNDER SPECIFIC PROCESSES)
abnormal cotton conditions. Cavitoma, honeydew, immaturity, green cotton, contaminated cotton, processing suggestions 3206
agricultural policies in United States and other countries. changes, effects on future production and trade 7217
agricultural practices. effect on fiber quality 3221
American cotton studied to determine criteria for designing cotton mixes for spinning 6433
American. rotor spinning and resulting yarn 2521
AMS Cotton Division's HVI Quality Control Program. committee review 7047
ash content of linters. presence of different trash constituents 3211
Bacillus and Enterobacter soluble toxins. toxicity of cotton dust 8908
bacteria and endotoxin. statistical, biological analysis 8855
bacterial populations in lint from [1986] Texas harvest 8857
bacterial populations. effects of plant morphological characteristics 8856
bale opening. plucking conditions and tuft weight 8166
bract extract. pulmonary responsiveness in exposed volunteers 8858
bract extracts. mass spectrometry for bronchoconstriction agents 8859
bracts, dust. platelet binding in endothelia after exposure, role in byssinosis 8860
bracts. tannin content of bracts studied on three cotton varieties in the United States 6437
byssinosis from dust. reductions in textile workers, correlation to drop in overall workplace fly levels 8863
byssinosis. contribution of presence of mitogens and tannin 8862
byssinosis. in vitro model of constrictor effect on pulmonary muscle 8861
byssinosis. measurement of endotoxins 4758
card. mixing and evenness action, relationship 112
Caribbean Sea Island cotton production increases. new supply system 4805
cleaning operations, determination of quantitative efficiency factor 7155
cleaning. better results with fixed carding segments and suction system 5730
colored cotton, light spotted. effect of cotton color on other fiber properties, yarns, and fabrics. USDA cotton standards 3205
commercial cotton gin drying systems. current research and potential for improvement 6438
comparison of flax and cotton dust toxicity 8864
consumption increases and consumer preferences. continued market share gains 7218
conventional ginning practices. effect on fiber length distribution 6439
cotton fibers studied for determining bacterial types 8852
cotton graft copolymers. hypochlorite oxidation 2223
cotton improvement research and production practices in India. relation to fiber quality 3212
cotton plant stalk. use for production of pulp and paper 3505
cotton plant stalks. chemical composition of different species 3213
cotton processing. unfavorable plant conditions 7988
Crosrol card conversions. cotton carding 5732
deactivation of dust toxicity. role of arachidonic acid treatment 8865
dead end chute feeding, more uniform cotton sliver, parameters 4062
detoxification of dust endotoxins using ethanolic compounds 8866
differential ginning. differences in quality resulting from different gin stand positions 6440
dust and byssinosis surveys in Lancashire mill workers, prevalence 8867
dust and byssinosis. [1987] Endotoxin Inhalation Workshop 8964
dust and endotoxins. TNF and Interleukin-1 production in alveolar macrophages 8868
dust and inhibition of lung cancer 8847
dust byssinosis symptoms and vitamin C effect 8869
dust evaluation. physiological and cellular changes of byssinosis 8870
dust exposure. causes of chemotactic activity in pulmonary system 8871
dust studies. acute pulmonary functions at non-irritating levels 8872
dust testing for biological potency and ultrastructural preparations 8873
dust toxicity. endotoxin content in mill observations 8875
dust toxins, human lung response to exposure. conditions of constriction 8874
dust, byssinosis. mass spectrometry examination of cellular lipid pool 8904
dust, endotoxin and terpenoid extraction. correlation of sample with lab mast cell data 8876
dust, endotoxins. structural features, molecular biology 8916
dust, tannin component. contribution to byssinosis 8903
dust, toxicity. emphysematous and fibrotic responses of lung tissue 8911
dust. animal model response evaluation to exposure 8877
dust. effectiveness of ethanol, sodium hydroxide, hydrochloric acid endotoxin reduction treatments 8881
dust. electron microscopy evaluations of subchronic pulmonary exposure 8879
dust. endotoxin inhalation evaluation in animal lung tissue 8880
dust. evaluation of quantitative chromogenic assay for analysis of endotoxins 8878
dust. inhalation studies on animal models, pulmonary response 8883
dust. isolated cell bound endotoxin relationships 8882
dust. lab animals with high exposure, pulmonary interruption 8884
dust. LPS toxicity samples unreliable in comparison 8910
dust. measurements of environmental endotoxin and LPS 8885
dust. possible anti-cancer properties 8902
dust. preparation of samples after solvent treatment for endotoxin reduction 8886
dust. pulmonary reaction studies on animal models 8905
dust. reduction of endotoxins, amines, and tannins with solvent treatments 8888
dust. reference for comparison of LAL activity of endotoxin 8887
dust. studies of cholesterol, ionic calcium role in byssinosis 8889
dust. testing of Limulus amebocyte lysate activity of endotoxin preparations 8890
dyeing and finishing research laboratory operated by Cotton

Incorporated 2204
emerging ginning. technology. new and improved machines for drying, cleaning and ginning 6441
endotoxin content from different harvest sites for [1986] crop 8895
endotoxin in bacterial residue. correlation with gram-negative bacilli 8896
endotoxins and tannins. role in etiology of byssinosis 8893
endotoxins causing byssinosis denatured by various solvents 7276
endotoxins in dust. correlation to inhalation-caused pulmonary edema 8892
endotoxins. PAF factor in lung response to exposure 8894
endotoxins. secondary pulmonary inflammation mechanisms 8891
Enterobacter in dust. respiratory inhalation study with celluiosic dust 8853
Environmental Protection Agency. revised national ambient air quality standards. effects on ginning 7193
evaluation of bacterial populations from boll opening through harvesting 8897
fiber configuration, parallelization, removal of hooks. studies of long and medium staple maharashtra cottons 5453
Fiber Processing Center operated by Cotton Incorporated 2202
fiber quality differences between top and bottom of plants 6442
fiber strength premium paid to cotton producers. program advantages 7219
finishing, durable press reagents. formaldehyde release markers 2794
finishing. structural aspects. magnesium chloride catalyst 6142
fire resistant polyacrylonitrile fiber and fabric 7354
gin drying system. fundamentals of moisture removal from cotton. drying mechanisms 6443
gin process control system. dynamic simulation model designed to optimize profits, minimize processing and energy consumption 6444
GINQUAL digital simulation model predicts cotton quality 6434
global supply and demand 2406
grade comparison. effects of cotton grade on fibers, yarns, and knit, dyed fabrics 6445
heat. enhanced cotton cleaning and seed separation. effects of heat on cotton fibers 6446
honeydew contamination from aphid infestations. sticky [1986] San Joaquin Valley cottons. testing 6447
HVI and Stelometer strength measurements. usefulness of measurements to cotton breeding program 7048
HVI design factors. strength level measurement differences compared to reference measurements 7049
HVI testing and blending. advantages at Cone Mills 7154
immature cottonseed. measurement of frequency in six mid-South cotton cultivars 6448
impurity content. method to determine, developed in West Germany 5451
India. achievements in cotton improvement research 3210
India. cotton production and constraints. present status 3222
Indian cotton linters. chemical and mechanical analysis 3228
industry uncertainties evaluated with computer-based econometric model 7220
instrument, prototype, for measurement of distribution of fiber length and diameter 7050
international trade flows of raw cotton among exporting and importing countries [1986/1987] 7221
Light Spotted (LS) grade cotton in Southeast United States. dramatic increase in last seven years. possible causes 6435
lint cleaning. improves cotton grade but decreases bale weight and staple length 6449
lipopolysaccharide endotoxin from lint. respiratory disorder study 8898
liquid ammonia and caustic soda treatments on jute and cotton. comparisons 6834
lower grade cotton processing on modern equipment 4806
major exporting countries' cotton policies and subsidy measurements 7222
mathematical analysis of single stage preparatory process for cotton using sodium hypochlorite 8722
mercerization process parameters. impact on properties 2726
mercerization, slack, varying washing and stretching parameters 2727
moisture instruments considered for use in HVI systems. near-infrared light measurements 7051
nep counting and sizing. new instrument and automated method 7052
neps and motes in Pima cotton traced to formation of ovule fibers and ineffective pollination 5605
neps. microscopic analysis 6473
Orlon acrylic fibers with manmade and natural fibers. Du Pont types of yarns, effects, and knit fashions 2536
oxidation of cellulose acetate and cotton linters to determine thermodynamic parameters 810
Pakistan upland cottons. fiber characteristics 7987
peg improvement and design effects on cleaning and opening of cotton 4092
Pima cotton crop. defoliation project 7991
plant acids and sugars. lint bacterial contamination dynamics 8899
polyethylene glycol maintains swollen state of cotton during sublimation transfer printing 6829
preharvest sampling. prediction of fiber properties. [1982-1987] results 6450
preparation and spinning of lower grade cotton in Hungary 4897
processing and testing of Texas cottons. properties, spinning performance, yarn quality 4809
production in Texas. shutdown and break-even points estimated and compared to price levels 6451
production. regional patterns and shifts in cotton acreage, production, and profits in United States 6432
properties related to growing and cultivation techniques 3214
quality control. comparison of different video trashmeters 7053
quality requirements for specific end uses. India 3203
Quarry Bank Mill. working museum of cotton industry 8753
raw materials, top quality needed to ensure optimum spinning results 4930
rotor spun cotton. comparison of processing quality of gin-cleaned cotton versus mill-cleaned 6452
scanning type trashmeters. modified to provide trash particle size information 7054
seed coat and mote fragment contamination. method for reduction 6454
seed coat content in cotton lint. ATIRA determination method 8684
seed coat fragment formation and removal. research review 6455
seed coat fragments in ginned lint. effect of varieties. harvesting. tinning practices 2407
seed coat fragments in United States cotton bales. measurement 6453
slack mercerization, effect of weave on weft shrinkage 2728
Soviet cotton waste standards, released [January 1987] 4012
stains, oily, removed by several different methods 585
stelometer testing versus HVI line testing. comparison of results, levels of accuracy 7055
stickiness. causes and selective, chemical, and processing solutions 8154
strain rate. effect on strength of single fibers, yarns, and yarns with varying short fiber percentages 7056
sulfonic acid groups in copolymers of acrylonitrile and sodium methalylsulfonate 4843
synthetic and natural fibers compared. future prospects. world-wide situation applications, demands 1601
tannin. effects on pulmonary cells 8900
Texcellana. Texas cotton and short-shorn wool blend for denim and sweater production 928
Textile Testing Services operated by Cotton Incorporated 2203
total fiber consumption and domestic mill demand. influencing factors 6456
tower drying systems for cotton. improved drying efficiency 6457
towerless seed cotton drying systems. new devices and arrangements. advantages 6458
trade, stocks, production, consumption. global data. United States credit situation 4005

United States cotton crop studies. byssinosis research 8854
United States cotton industry. statistics and trends 7270
United States producers entitled to benefits of Special Agricultural Workers Program because cotton ruled fruit 2405
United States. outlook for cotton [through 1990]. price, production, consumption, trends 6436
variables affecting market, cotton cycles, future prospects 2408
video trashmeters and Shirley Analyzer results compared for non-lint non-lint content of cotton samples 7057
warps. waxed with anionic and nonionic surfactants to reduce friction 3418
waste processing in Soviet mills. modernization of inferior machinery 4807
waste. processing short staple cotton waste at Kispesti Textile Factory 4950
weaving. production increases on shuttleless, rapier, and air jet looms. data on cotton weaving 224
world cotton market transition. effects on United States industry analyzed with econometric model 7223
worldwide cotton supply. demand, production, consumption forecasts [1987-1992]. trends 6459

COTTON BALING, SEE BALING.

COTTON BATTING, SEE BATTINGS.

COTTON FABRICS
activewear. prominent at Super Show for men 2900
agitation and sorption. C.I. Reactive Blue 109 and cotton print fabric 6127
aminofunctional silicones, diethylene glycol, and cocodiethanolamide improved finish cotton fabrics 473
bleaching of green motes by using hypochlorite and hydrogen peroxide 5178
cationization, printing applications 5284
chemical changes in cellulose molecules of cotton cloth estimated via reflectance absorption infrared spectroscopy 7271
chemical finishing of cotton and cotton blend knits 6939
colored cotton, light spotted. effect of cotton color on other fiber properties, yarns, and fabrics. USDA cotton standards 3205
computer analysis to produce highest quality cotton fabrics on all loom types 4203
condensation temperature and formaldehyde release in durable press cotton and polyester fabrics 8557
corduroy, mill executives discuss [1988] market 2651
cotton corduroy fabric woven on air jet loom. influence of filling yarn characteristics 1012
cotton fabrics, strength increased with core yarns 7391
Cotton Incorporated develops heavyweight fabric for bale bags and outerwear 2409
Cotton Incorporated's Research Center to develop innovative cotton products. two new fabrics 5606
Cotton True Performance Textile Designers Awards sponsored by Cotton Incorporated 6751
cotton, cotton/polyester knit fabrics, dyed with leuko ester dyes, effects 4353
creaseproofing and shrinkproofing. new NKK catalyst 484
crosslinked DMDHEU and cotton. pore structure and solute accessibility 4485
curing conditions. attachment of polyethylene glycol 2792
deformation of cotton single jersey knits. causes and solutions 5967
denim dyers go darker at Thomaston and Avondale Mills. high twist and yarn dyed fabrics 5112
denim, major trends [fall 1988] jeans market. treatment and products from various manufacturers 2781
denim, wet finishing process. stonewashing, acid washing, overdyeing 1181
denim. Burlington's dryfinished, faded denim product. Pre-Washed. finishing process, fabric hand 1984
denim. jeans sales soft in spite of fashion finishes 1383
dimethylol ethylene urea treatment for durable press finish. effects of curing on crosslinking 8545
drying performance test with slightly alkaline water and thymolphthalein indicator 8712
durable press and fluorochemical finishes 6147
durable press finish. chemical treatment 5304
durable press with tetracarboxylic acids 7641
durable press. additives and aminofunctional silicones 4486
dyeing pretreatment. desizing and scouring, degreasing and bleaching 6089
dyeing with fiber reactive and sulfur dyes 681
dyeing. innovations in processes and machinery 4425
dyeing. testing for residual surfactants using thin-layer chromatography 4896
ethoxylated quaternaries are useful reactive additives for durable press finishing of cottons 6144
Fabric Development Center operated by Cotton Incorporated 2205
fashion trends from Giorgio Correggiari. Motorvator look in sportswear 4611
finishing techniques, high quality. low temperature plasma cotton pretreatment 1180
finishing. Babcock's computer controlled continuous pretreatment range 4410
finishing. microstructure and chemical aftertreatment 5113
fixatives, effect on direct dyes for cotton fabrics 5229
flame retardancy. heat cure process 4495
flame retardant fabrics. thermal behavior and properties 1835
flame retardant finish based on phosphonium precondensate and urea 479
flame, water, and rot resistance imparted by N-methylol melamine resin with inorganic salts and silicone resins 1258
flameproofing cotton fabrics. method 3529
fleece. crossover sales in men's active and sportswear. increasingly varied product mix 2904
formaldehyde liberation during prolonged storage of durable press textiles 6143
formaldehyde release affected by pretreatments and dyeing 1975
Gellair process for finishing heavyweight denim from Burlington Industries and Cotton Incorporated 2706
ginning and fiber properties. effect on dyeing imperfections 7997
grade comparison. effects of cotton grade on fibers, yarns, and knit, dyed fabrics 6445
grafted with cationic additives to make dyeing easier. anionic dyes. testing 380
high grade, on K2 loom from Sulzer Rueti 4218
ignition temperature of cotton and polyester/cotton blends at 950 degrees Fahrenheit 5132
industry. Kanebo Spinning, Japanese venture, opens spinning plant in Georgia 2340
jeans. resurgence in consumer demand due to new finishing techniques 1374
knit. dimensional stability with RPR-Quality System 390
knit. heat and moisture transfer properties (Conf. Paper) 8707
knits, dimensional stability. production in Hungarian industry 8408
knits. effect of chlorine on colorfastness. dyed with reactive dyes 395
knits. IIC Starfish software for fabric development simulation 8801
liquid ammonia and caustic soda treatments on jute and cotton. comparisons 6834
liquid ammonia treatment of cotton and cotton blends. breaking ammonia adduct. effect on cellulose structure 6836
low density yarns on the ATPR-100-4 rapier loom 213
LPS-140-10 washing line for cotton fabrics, energy saving system 5313
men's outerwear. treated or washed fabrics popular at NAMSB 2915
Mercer and Lowe, mercerizing cotton fabrics 1191
mercerizing. wetting agents 4412
methyl cellulose combined with crosslinking agent on cotton printcloth for restricting migration during drying 7646
Mikawa. Japanese cotton fabric producer. marketing efforts. cotton fabric production 4990
mildewcides compared for linen rental industry 5402

mixed catalyst system for durable press cotton fabrics 2784
moisture sorption characteristics of cellulosic fabrics. examination by NMR spectroscopy 8377
neps treated with mercerization, submercerization strength sodium hydroxide 398
non-acidic bleaching with rongalite and Trilon B. less damage to cotton fabrics 4403
nonwoven pre-stressed webs 8348
parameters for glyoxal use instead of formaldehyde, catalysts, processing 4497
polyacrylic acid-epichlorohydrin finish 8543
polycarboxylic acid treatment for wrinkle-resistant cotton fabrics developed by USDA 7643
Premiere Vision show, bright, vivid cotton fabrics prominent 2652
pretreated with ethylene glycols. solubility parameters 1245
pretreatment processes for cotton fabrics 3570
print dyeing. making cotton fabrics cationic. methods 2764
printcloth. C. I. Reactive Blue 109 dye 434
printing of knit and woven 385
printing with ethone 5285
processing, conservation. steam 1520
pumice stones for stonewash and acid wash finishes 1263
reactive-dyed. color changes from resin finishing in presence of DMDHEU 8550
regeneration from cotton gray fabrics 1916
resin finishing with improved performance and low formaldehyde release 1974
rubfastness tested with aggregated iron oxide 7512
shrinkage prevented by proper application of liquid ammonia 483
shrinkproof. non-formaldehyde, modified glycol finishes, from Hoechst 482
singeing with Pyrotrop singeing machine improves quality 4418
Sirrix CRC Liquid. wetting agent used in pretreatment processes 5177
sodium hypochlorite, hydrogen peroxide bleaching. optimum processing 8449
soil release properties with reactive carboxymethyl cellulose finishes 8553
soiling and soil removal, residual soil studies with electron microscopy 582
Soviet woven apparel fabrics [1988]. designs, fashions 4385
stain removal. presoaking with protease 2868
testing, one hundred percent cotton bleached cloth, effect of ultraviolet rays 1905
Textile Testing Services operated by Cotton Incorporated 2203
Tosco Dia NF flame retardant fabric 8376
tubular cotton. shrinkproofing for tumble drying 6164
tubular. Friedrichsfeld installs large scale sodium chlorite range in Turkey 8453
Vaporloc pressure scouring system from Mather Machinery for cotton fabrics and blends 6842
vat dyeing. effects of thermofixation on dyeability 6868
workwear fabrics, use of cottons and cotton blends. developments 5116
woven and double knits. preparation. dyeing, pad batch and continuous 384
woven cotton fabrics, willowing and deformation. use in nonwoven linings 4680

COTTON FIBER TESTING

abnormal cotton conditions. Cavitoma, honeydew, immaturity, green cotton, contaminated cotton, processing suggestions 3206
American cotton studied to determine criteria for designing cotton mixes for spinning 6433
AMS Cotton Division's HVI Quality Control Program. committee review 7047
analyzed for fineness, length, and strength 815
blend ratio in ramie and cotton yarns. microscopic evaluation 167
cellulose degradation during prolonged heat treatment 3558
cellulose yield of cotton linters. determination using Shirley Trash Analyzer 3808
classing system used in United States detrimental to producers 813
color discrimination for white and light spotted, low middling and strict low middling 7579
comparative ginning methods and fiber performance 6464
comparison of HVI and Shirley Analyser trash testing 7058
conditioning apparatus, rapid, using dry air and room air 163
conventional ginning practices. effect on fiber length distribution 6439
correlation between cotton fiber maturity, fineness, and micronaire value study findings 2410
cotton dust endotoxin and terpenoid extraction. correlation of sample with lab mast cell data 8876
cotton samples. comparison of different video trashmeters used in quality control 7053
criteria for quality. current investigations 6461
dust. preparation of samples after solvent treatment for endotoxin reduction 8886
Engineered Fiber Selection developed by Cotton Incorporated 3215
enhanced enzymolysis of cotton fibers and plant stalks 3219
equipment applications and consequences for producers 8682
fiber configuration, parallelization, removal of hooks. studies of long and medium staple maharashtra cottons 5453
Fiber Processing Center operated by Cotton Incorporated 2202
fiber quality differences between top and bottom of plants 6442
fineness maturity tester Model III/HVI from Shirley Institute 814
flame retardant properties by thermogravimetric analysis 1835
ginning seed cotton, quality parameters delineated 3204
GINQUAL digital simulation model predicts cotton quality 6434
grade comparison. effects of cotton grade on fibers, yarns, and knit, dyed fabrics 6445
heat. enhanced cotton cleaning and seed separation. effects of heat on cotton fibers 6446
high volume instrument classification, spreads slowly through the industry. transition problems 5611
high volume instruments (HVI) by USDA for classing United States cotton 3216 3217
honeydew contamination from aphid infestations. sticky [1986] San Joaquin Valley cottons. testing 6447
HVI 3500 and HVI 4000 Fiber Information Systems from Motion Control 812
HVI and Stelometer strength measurements. usefulness of measurements to cotton breeding program 7048
HVI design factors. strength level measurement differences compared to reference measurements 7049
HVI systems and computers for producing high quality yarns 3319
HVI testing and blending. advantages at Cone Mills 7154
HVI. potential, drawbacks 8679
HVI. quality measurement. length and diameter distribution 8680
IIC-Shirley Fineness/Maturity Tester 5452
Indian cotton linters. chemical and mechanical analysis 3228
instrument, prototype, for measurement of distribution of fiber length and diameter 7050
instruments for rapid assessment of cotton fiber maturity 5617
International Cotton Conference [1988] highlights. cotton fiber and yarn testing methods 4808
International Cotton Conference, Bremen [1988]. abstracts of papers 6401
lint cleaning. strength and fineness related to damage 7272
maturity, fineness, and micronaire value 2207
maturity, red and green differential dyeing to determine spectrophotometric analysis 3218
maturity. near infrared versus IIC Shirley Maturity Tester Model III HVI 6263
measurement and testing developments 7799
Mississippi Delta cotton. effects of varieties, harvesting, and ginning on nep content 8001
moisture instruments considered for use in HVI systems. near-infrared light measurements 7051
moisture measurement. BTRA CM-1 and VM-1 portable testers 8683
monograph of articles from Belgian Cotton Research Group, research on cotton fibers, properties and developments 1605

nep counting and sizing. new instrument and automated method 7052
Pakistan upland cottons. fiber characteristics 7987
particle induced x-ray emission analysis of wool and cotton samples prepared as mordant standards 5474
preharvest sampling. prediction of fiber properties. [1982-1987] results 6450
processing and testing of Texas cottons. properties, spinning performance, yarn quality 4809
raw materials testing practices by TNS Mills. HVI, Digital Fibrograph, Peyer testing 2208
rotor spinning properties of American cottons 4920
scanning type trashmeters. modified to provide trash particle size information 7054
secondary walls. mean volume of never dried fiber samples is reliable quality indicator 6462
seed coat content in cotton lint. ATIRA determination method 8684
Shirley Development's FMT. compatibility with HVI testing 8681
short fiber measurement, yarn quality, relationship to length uniformity 4810
small angle X-ray scattering intensity 8685
spinning technologies and impact on cotton properties 5773
stelometer testing versus HVI line testing. comparison of results, levels of accuracy 7055
stickiness due to aphid excretion 5454
strain rate. effect on strength of single fibers, yarns, and yarns with varying short fiber percentages 7056
studies on bacterial types on raw cotton fibers 8852
Textile Testing Services operated by Cotton Incorporated 2203
thermogravimetric analysis for distinguishing unwashed, washed, and bleached fibers 8155
USDA report. crop [1987]. on cotton fiber and spinning performance from major United States cotton areas, data 6460
USDA's High Volume Instrument for calibrated cotton, higher strength measurement given than normal 1604
video trashmeters and Shirley Analyzer results compared for non-lint content of cotton samples 7057
weathering, its effect on length, strength, micronaire, grade, color, trash 2456

COTTON FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS COTTON VARIETIES, HOOKED FIBERS, NEPS)

bicomponent yarns with different staple length. properties of cotton/polyester yarn during spinning 3821
bleaching. 2,2'-bipyridine catalyzed bleaching with peracetic acid 2722
cellulose crystallization affected by cotton 4404
cellulose fibers. X-ray orientation profiles. changes due to swelling and stretching treatments 5604
chemical compatibility for printing 385
colored cotton, light spotted. effect of cotton color on other fiber properties, yarns, and fabrics. USDA cotton standards 3205
consumption worldwide of cotton, wool, manmade, cellulose fibers since [1960] 4001
control of air flow, feeder to ensure cotton quality, even flow 4081
cotton, polyester and viscose fine-titer yarns. performance in fabric production 3407
defects. treatment with acid to remove fluff 8143
dyeing machinery from Polmatex-Cenaro 4391
effect on dyeing imperfections 7997
enhanced enzymolysis of cotton fibers and plant stalks 3219
fiber strength premium paid to cotton producers. program advantages 7219
fineness, strength, and staple length relative to the strength of rotor spun yarn 3049
ginning seed cotton. improvement of cotton fiber properties 3204
heat. influence on chemical and physical properties and processing quality 4811
HVI data. statistical analysis 7059
hydrogen bonding in amorphous regions of cotton fiber 2411
IIC-Shirley Fineness/Maturity Tester 5452
laboratory cultivation without soil, sun, or cotton plants 5607
market demand for higher quality products, corresponding need for better processing 8157
Micronaire values, fineness, maturity. relationships 1606
Model BDA 20 open end rotor spinning machine from Strojimport 3369
moisture content in laps and sliver, computerized control method 123
molecules, long chain, orientation changes measured by X-ray angle and optical orientation angle 15
peracetic acid catalyzed to bleach cotton fibers with 2,2'-bipyridine 3567
pre-carding and pre-draw-frame blending of polyester/cotton blend yarns 8146
properties related to growing and cultivation techniques 3214
rotor spinning demands for finer, stronger, longer fiber properties 3356
rotor spinning of cotton and cotton waste yarns 4933
spinning technologies and impact on cotton properties 5773
stabilizers used to maintain degree of polymerization in cellulose molecule during cutting 7989
stickiness due to aphid excretion 5454
structure and properties. effects of mercerization 6463
system from Cotton Incorporated for wet processing of cotton in yarn or fiber stages 2504
tenacity of Modal viscose/cotton blend yarns in fine weights in circular knit fabric constructions 3397
Tricolino from Shikibo. triacetate yarn wrapped with cotton 6498
Turkish. processing by Masterfil Cotton Spinning Company 823
United States cotton industry. statistics and trends 7270

COTTON GINNING

commercial cotton gin drying systems. current research and potential for improvement 6438
comparative ginning methods and fiber performance 6464
conventional ginning practices. effect on fiber length distribution 6439
differential ginning. differences in quality resulting from different gin stand positions 6440
differentially ginning seed cotton. improved cotton fiber properties 3204
effect on dyeing imperfections 7997
emerging ginning technology. new and improved machines for drying, cleaning and ginning 6441
Environmental Protection Agency. revised national ambient air quality standards. effects on ginning 7193
fiber quality differences between top and bottom of plants 6442
gin drying system. fundamentals of moisture removal from cotton. drying mechanisms 6443
gin process control system. dynamic simulation model designed to optimize profits, minimize processing and energy consumption 6444
GINQUAL digital simulation model predicts cotton quality 6434
heat. enhanced cotton cleaning and seed separation. effects of heat on cotton fibers 6446
immature cottonseed. measurement of frequency in six mid-South cotton cultivars 6448
India. cotton production and constraints. present status 3222
lint cleaning. strength and fineness related to damage 7272
Mississippi Delta cotton. effects of varieties, harvesting, and ginning on nep content 8001
Pima cotton. harvesting and storage 7990
removal system, analyzed. device reduced to 80 mm for increased production 4912
rotor spun cotton. comparison of processing quality of gin-cleaned cotton versus mill-cleaned 6452
seed coat and mote fragment contamination. method for reduction 6454
seed coat fragment formation and removal. research review 6455
seed coat fragments in United States cotton bales. measurement 6453
seed cotton cleaning, drying, and lint cleaning. effect on fiber's end use value 7273

tower drying systems for cotton. improved drying efficiency 6457
towerless seed cotton drying systems. new devices and arrangements. advantages 6458

COTTON GROWING
abnormal cotton conditions. Cavitoma, honeydew, immaturity, green cotton, contaminated cotton, processing suggestions 3206
aflatoxin in Arizona cottonseed. infection after boll opening studied 816
agricultural practices. effect on fiber quality 3221
bacteria and endotoxin in cotton. statistical, biological analysis 8855
bacterial populations in lint from [1986] Texas harvest 8857
bacterial populations. effects of cotton plant morphological characteristics 8856
Caribbean Sea Island cotton production increases. new supply system 4805
China, Soviet Union, and United States. [1988, 1989] price and production predictions 2412
cotton improvement research and production practices in India. relation to fiber quality 3212
effect of late season rain on [1984] crop in Mississippi Delta 7992
endotoxin content from different harvest sites for [1986] crop 8895
evaluation of bacterial populations from boll opening through harvesting 8897
fiber strength premium paid to cotton producers. program advantages 7219
HVI and Stelometer strength measurements. usefulness of measurements to cotton breeding program 7048
India. achievements in cotton improvement research 3210
industry uncertainties evaluated with computer-based econometric model 7220
laboratory cultivation without soil, sun, or cotton plants 5607
Light Spotted (LS) grade cotton in Southeast United States. dramatic increase in last seven years. possible causes 6435
Mississippi Delta cotton. effects of varieties, harvesting, and ginning on nep content 8001
Pima cotton crop. defoliation project 7991
plant acids and sugars. lint bacterial contamination dynamics 8899
pollination, neps and motes in Pima cotton traced to formation of ovule fibers and ineffective pollination 5605
prices, production, and consumption [1986-1987] season 801
production in Texas. shutdown and break-even points estimated and compared to price levels 6451
properties related to growing and cultivation techniques 3214
Shandong province in China. impact of SC-6 hybrid strains 5608
stickiness due to aphid excretion 5454
sugar on cotton, causes. effect of humidity on processing 7993
Turkey. fibers analyzed for fineness, length, and strength 815
United States cotton industry. statistics and trends 7270
United States economic outlook [1988]. domestic and international study 4813
United States. regional patterns and shifts in acreage, production, and profits 6432
USDA Agricultural Research Service's program to improve cotton for textile industry. fiber properties, strength and elongation 3220
world cotton situation. stocks, production, consumption, prices 6465
Zimbabwe cotton husbandry and production 5609

COTTON INDUSTRY (SEE ALSO OTHER HEADINGS, SUCH AS TEXILE TRADE)
"Brand-A-Bale" marking ink for cotton bales from Cotton Incorporated and Stern Chemtech 4812
abnormal cotton conditions. Cavitoma, honeydew, immaturity, green cotton, contaminated cotton, processing suggestions 3206
agricultural policies in United States and other countries. changes, effects on future production and trade 7217
apparel and home fabric market, cotton's share. four percent increase from previous year 818
apparel and home fabrics market, cotton's growing market share. performance characteristics. processing procedures 3224
automated control, testing, computers in cotton industry in USSR 5522
Caribbean Sea Island cotton production increases. new supply system 4805
cellulose fibers. critical standards of quality 3209
Census Bureau's Current Industrial Reports. increased domestic consumption of fine wool, cotton yarns and fabrics 3242
China, Soviet Union, and United States. [1988, 1989] price and production predictions 2412
China. domestic shortages of cotton textiles due to excessive exports 2413
colored cotton, light spotted. effect of cotton color on other fiber properties, yarns, and fabrics. USDA cotton standards 3205
consumer attitudes, effect of baby boomers on cotton apparel, [1985] sales increase 2416
consumption [by 2000]. third world and industrialized nations 819
evaluation of structure and performance of marketing system for Tamil Nadu cotton 3227
fiber consumption up in United States, per capita [1987] figures 5601
future outlook [1990's] at Financial Times International Conference 699
global cotton outlook, trade and crop prospects 17
global supply, demand, and prices. USDA estimates 2401
growth in men's wear market predicted by Cotton Incorporated's president 4814
high volume instrument classification, spreads slowly through the industry. transition problems 5611
India. achievements in cotton improvement research 3210
India. cotton improvement research and production practices. relation to fiber quality 3212
India. cotton production and constraints. present status 3222
industry uncertainties evaluated with computer-based econometric model 7220
International Cotton Advisory Committee. world statistics 7994
International Cotton Conference, Bremen [1988]. abstracts of papers 6401
international markets grow due to consumer demand, improved product performance, and competitive prices 2418
international statistics. spinning, weaving, and raw material consumption data [1985] from textile producing countries 2417
international trade flows of raw cotton among exporting and importing countries [1986/1987] 7221
interview with Cotton Incorporated's J. Nicholas Hahn. company plans, cotton industry, textile industry 3075
Ireland. future prospects. optimistic outlook. potential problems 7858
Japanese imports of United States, Australian, Chinese, and Pakistani cotton figures 2414
major exporting countries' cotton policies and subsidy measurements 7222
market demand for higher quality products, corresponding need for better processing 8157
market outlook, increased sales. Quick Response and Cotton Inc. 4815
market profile, four percent increase, 1.8 billion dollars at retail 1607
market share industry sales for cotton [1987-1988]. executives predict continued growth 820
marketing, United States Department of Agriculture appoints advisory committee 1609
needle punched and nonwoven fabrics, use in cotton trade 1799
Nisshinbo Industries and Kanematsu-Gosgo open Nisshinbo California, cotton fabric and yarn mill. details 3092
open end spinning in Polish cotton industry, products, machinery, trends [since 1984] 4105
Pakistan upland cottons. fiber characteristics 7987
Pakistan. [1986-1987] cotton situation. prices. trade research 7982
Pakistan 6402
price hike. raise in prices of T-shirts 2879
price, production, consumption, stock. discrepancies between projections by different organizations 4816

processing waste water. purification, reusing, chemical and biological cleaning 4760
production and consumption [1987-1990]. current status and projections 8941
production in Texas. shutdown and break-even points estimated and compared to price levels 6451
quality requirements for specific end uses. India 3203
Quarry Bank Mill. working museum of cotton industry 8753
report on global stocks and crops for cotton and other agricultural products from USDA 1608
report on market share. increase in men's retail market 7939
seed cotton cleaning, drying, and lint cleaning. effect on fiber's end use value 7273
sheeting activity in industrial gray goods market [third week of March 1988] 2659
Southern Mill Rules amended for buying and selling United States cotton 7937
Soviet Union, yarn and sewing thread production 105
spinning performance of United States cottons during rotor spinning 3225
spinning plant opening in Georgia. Japanese Kanebo Spinning 2340
stocks decline and prices up for current season. expect trend reversal for upcoming season 822
total fiber consumption and domestic mill demand. influencing factors 6456
United States and international cotton industry. production, consumption, supply 3223
United States and world cotton situation and [1988] outlook 8940
United States cotton industry. statistics and trends 7270
United States cotton market share jumps two percent, consumer demand driving force 7274
United States economic outlook [1988]. domestic and international study 4813
United States Pima cotton popular in Asian markets 7938
United States producers entitled to benefits of Special Agricultural Workers Program because cotton ruled fruit 2405
United States raw cotton prices become more competitive through USDA price structure changes 5610
United States [1987-1988] production. reasons for downward revision of USDA crop estimates 817
United States [1987] textile and apparel trade deficit 2367
United States. outlook for cotton [through 1990]. price, production, consumption, trends 6436
United States. projected growth 2415
United States. regional patterns and shifts in acreage, production, and profits 6432
USA, economic analysis, history 4006
USDA Agricultural Research Service's program to improve cotton for textile industry. fiber properties, strength and elongation 3220
USDA analyst's prediction [1988]. cotton consumption. factors contributing to lower consumption 16
USDA report. crop [1987]. on cotton fiber and spinning performance from major United States cotton areas, data 6460
wool and cotton market prices. federal deregulation, international demand 2402
world cotton market transition. effects on United States industry analyzed with econometric model 7223
world cotton prices, supply, consumption [1986-1987] Soviet cotton and textile industry, imports, exports 3226
world cotton situation. stocks, production, consumption, prices 6465
world production, consumption 5612
worldwide cotton supply. demand, production, consumption forecasts [1987-1992]. trends 6459
Zimbabwe cotton husbandry and production 5609

COTTON MARKETING (SEE ALSO OTHER HEADINGS, SUCH AS INTERFIBER COMPETITION, TEXTILE TRADE)
Caribbean Sea island cotton production increases. new supply system 4805
changes recommended by Cotton Marketing Advisory Committee for cotton marketing 7995
classing system used in United States detrimental to producers 813
colored cotton, light spotted. effect of cotton color on other fiber properties, yarns, and fabrics. USDA cotton standards 3205
cotton ginning process control system. simulation model minimizes processing and energy consumption 6444
economic outlook [1988] United States cotton. domestic and international markets 4813
evaluation of structure and performance of marketing system for Tamil Nadu cotton 3227
fiber strength premium paid to cotton producers. program advantages 7219
global supply, demand, and prices. USDA estimates 2401
impact of new spinning technologies 6477
international markets grow due to consumer demand, improved product performance, and competitive prices 2418
Light Spotted (LS) grade cotton in Southeast United States. dramatic increase in last seven years. possible causes 6435
prices, production, and consumption [1986-1987] season 801
production in Texas. shutdown and break-even points estimated and compared to price levels 6451
Southern Mill Rules amended for buying and selling United States cotton 7937
stocks decline and prices up for current season. expect trend reversal for upcoming season 822
United States Department of Agriculture appoints advisory committee 1609
United States Pima cotton popular in Asian markets 7938
United States. projected growth 2415
Universal Standards Agreement. regulates international trade standards 821

COTTON SAMPLING, SEE SAMPLING.

COTTON STORAGE
combing. Unilap system using E 7/5 comber and D 1/2 drafting frame from Rieter 4909
Pima cotton. harvesting and storage 7990
Unilap process using E 7/5 comber from Rieter 4910

COTTON SYSTEM MACHINERY (SEE ALSO UNDER HEADINGS OF SPECIFIC MACHINERY)
automated control, testing, computers in cotton industry in USSR 5522
card clothing, development of high production 4078
carding machine, Falubaz CZ 693, modified to process low grade R6 cotton 4904
cotton and cotton system wastes. blending, roving, open end spinning, yarn uses 4097
new L2-50-1M cotton rover, design changes and abilities 4093
Truetzschler machinery for cotton preyarn processing 4085

COTTON SYSTEM PROCESSING (SEE ALSO UNDER HEADINGS OF SPECIFIC PROCESSES)
apparel and home fabric market, cotton's growing market share. performance characteristics. processing procedures 3224
ash content of linters. presence of different trash constituents 3211
bleached fiber. Edward Hall plant for continuous cotton processing 4817
bleaching of green motes by using hypochlorite and hydrogen peroxide 5178
bleaching. single stage process for cottons, advantages 8450
blending, intimate and/or drawframe for cotton/wool blends. dyehouse problems, apparel manufacturer 4075
carders, Graf Primasharp and Primatop 4905
chemical processing departments, viability 6663
Chinese mill studied for improved all-cotton yarn processing 174
cleaning operations, determination of quantitative efficiency factor 7155
cleanliness of raw cotton debated, concern raised about pepper trash generated by ginners. mill executives comment 2419
comber performance, high speed 6564

cotton/nylon 6, high speed. pre-yarn processing, spinning, yarn properties 4927
developments in short staple open end spinning 1707
dioxide molecules in steam used to neutralize alkaline in waste water from cotton finishing 4761
drafting. doubling and draft distribution. yarn quality 6567
dust and impurity determined by West German method 5451
dust control and cotton spinning. dust control oil with silica powder 4102
dust in mills investigated using computer model. research and technology of filters 4754
faults, finishing. cotton fabric preparation. desizing 8235
finishing of cotton fabrics. alkaline processing 4405
fly dust separation improved by computer simulation. laser modified polymeric filters 8906
heat. influence on chemical and physical properties and processing quality 4811
higher carding cylinder speeds and new mote knife design 7366
Indian cotton linters. chemical and mechanical analysis 3228
International Cotton Conference, Bremen [1988]. abstracts of papers 6401
lower grade cotton processing on modern equipment 4806
machinery. feed plate on carding machine effects carding efficiency, yarn quality 8156
market demand for higher quality products, corresponding need for better processing 8157
modern harvesting methods make it difficult to produce quality yarn, improved carding machinery needed 2420
ply spinning adapted to cotton spinning system. deficiencies of ply-spun yarns 949
polyester/cotton staple yarn, pre-yarn processing, dyeing, spinning, twisting 4900
preparation and spinning of lower grade cotton in Hungary 4897
rotor twisting, high speed. cotton fiber requirements 6577
short fiber measurement, yarn quality, relationship to length uniformity 4810
spin finishes for cotton. effect on processing performance of weathered fibers 2456
spinning of flax tow on cotton and worsted system technologies 3337
spinning performance of United States cottons during rotor spinning 3225
spinning. comparison of methods 5773
stickiness. causes and selective, chemical, and processing solutions 8154
sugar on cotton, problems in processing 7993
technology presented at [1987] ITMA 1586
Truetzschler machinery for cotton preyarn processing 4085
waste treatment. alkaline water from finishing. costs 4763
wool processed on cotton processing system 3320

COTTON VARIETIES (SEE ALSO UNDER THE HEADING OF COTTON FIBERS)
American cotton studied to determine criteria for designing cotton mixes for spinning 6433
American. rotor spinning properties 4920
conventional ginning practices. effect on fiber length distribution 6439
cotton plant stalks. chemical composition of different species 3213
HVI and Stelometer strength measurements. usefulness of measurements to cotton breeding program 7048
Mississippi Delta cotton. effects of varieties, harvesting, and ginning on nep content 8001
Pakistan upland cottons. fiber characteristics 7987
Pima cotton crop. defoliation project 7991
seed coat and mote fragment contamination. selection for fragment yield 6454
Shandong province in China. impact of SC-6 hybrid strains 5608

COTTON YARN
air jet loom preparation with lignosulfonate sizing agent 184
American cotton studied to determine criteria for designing cotton mixes for spinning 6433
anion exchangeable yarn for color removal from dyehouse effluent 760
carded yarn orders down due to cotton sweater slowdown at retail 1305
carding on ChMD-5 high speed. sliver quality, preparation for rotor spinning 117
chemical damage during processing. testing and evaluating damage 2210
combing waste, processing in preparation for rotor spinning 124
comparison of weaving yarns for elasticity, break resistance, degradation 8208
computer analysis of cotton yarns' strength and elongation, compared to lab tests 4659
cotton samples. microspinning and bulk spinning performance 3350
cotton yarn resistance along the back rest, lam, and heddles on the ATPR rapier loom 5029
cotton, cotton system waste in open end spun yarns, seven yarn evaluations 4100
cotton/polyester blend yarn with improved tensile properties 8173
diameter unevenness. measurement by ITQT Digital Hairiness Meter 3046
DREF-3 and Indian cotton. friction spinning results 6587
dyed. spinning on BD-200-RTsE spinner, defect prevention, IN twist intensifier 144
Epic sewing thread by the MEZ company. factory-based cotton and polyester yarn spinning facilities 3322
friction, effects on areas on wool, cotton, nylon yarns, parameters for speed, tension 4145
geometry and dimensional properties. shape factor 5460
glass filament core reinforcement. properties and applications 3530
grade comparison. effects of cotton grade on fibers, yarns, and knit, dyed fabrics 6445
hairiness of open end and ring spun yarns. effects of hank of sliver, twist multiplier, and chemical treatments 3398
hairiness. effect of fiber parameters in ring and rotor spinning 6582
HVI testing and blending. advantages at Cone Mills 7154
imported. shortages. United States apparel industry blames textile industry's import quotas 4776
International Cotton Conference [1988] highlights. cotton fiber and yarn testing methods 4808
International Cotton Conference, Bremen [1988]. abstracts of papers 6401
irregularities. data collection system 176
ITQT Digital Hairiness Meter. diameter and hairiness. comparison 3389
Ivchesmach's ChM-50 carder, tests on cotton sliver, yarns 4079
knitting open end yarns and spring needle wear 5526
laboratory tests on the effectiveness of graded pickers, cotton yarn 4091
low twist spinning using wet roving in ring frame 947
machine twist in rotor open end spun samples 7065
Mak cotton knitting yarns, production, dyeing 170
Masterfil Cotton Spinning Company. Turkish cotton fiber processing 823
Melana. dyeing on devices with perforated bobbins 1920
mercerizing. wetting agents 4412
model of damage caused by friction to cotton thread in various environments 4660
needle deterioration and relation to open end cotton yarn properties 4222
PA-250 device to separate warp yarns in loom, for cotton yarn weaving 4178
parameters for cotton spinning on the BD-200-RTsE rotor spinner 4114
plain loops of rotor spun cotton yarns. geometry and dimensional properties 2682
PPM-120-3 air jet spinner, operational parameters for cotton yarn 4122
prices [December 1987], steady market. outlook for spinners [1988], prices on various yarns 824

quality. rotor spinning performance of different United States cottons 2520
ring and rotor spinning. comparative spinnability testing 4931
rotor spinning of American cotton and resulting yarn 2521
rotor spinning of cotton and cotton waste yarns 4933
rotor spinning properties of American cottons 4920
rotor spun cotton yarns. area and linear properties relative to dimension 3538
rotor spun cotton yarns. loop length 6612
rotor spun cotton, cotton/blend yarns. thickness, twist and staple length, relation to breaking load 6588
rotor spun cotton. comparison of processing quality of gin-cleaned cotton versus mill-cleaned 6452
rotor spun doubled yarns 5754
Shirley yarn hairiness meter 7809
sized with polymeric agents, photoacoustic spectroscopy study 2533
Soviet Union, yarn and sewing thread production 105
spinning, open end. effect of air pressure at entrance of rotor cleaning device 2513
spinning. innovations in systems. automation and integration of processes 7372
strain rate. effect on strength of single fibers, yarns, and yarns with varying short fiber percentages 7056
system from Cotton Incorporated for wet processing of cotton in yarn or fiber stages 2504
tensile properties. model for analysis. advances in spinning technology 1443
tensile testing, formulas for rigidity modulus 179
Textile Testing Services operated by Cotton Incorporated 2203

COURTELLE IS AN ACRYLIC FIBER.

CO-WE-NIT, SEE KNITTING--WARP, KNIT FABRICS--WARP, KNITTING MACHINERY--WARP.

CRABBING, SEE DECATING, STEAMING.

CREASEPROOFING, SEE WASH-WEAR.

CREASE RESISTANCE, SEE CREASES AND CREASE RECOVERY.

CREASE RESIST FINISHING, SEE WASH-WEAR.

CREASES AND CREASE RECOVERY (SEE ALSO OTHER HEADINGS, SUCH AS, CREASING AND PLEATING, CROSSLINKING, DURABLE PRESS, WASH-WEAR)
crease recovery and durable press rating relationship to fabrics of different constructions 3521
wool. treatments to improve setting 6936
wool/cotton blends. improved wrinkle recovery by simultaneous treatment with Synthappret BAP and DMDHEU 1252

CREASING AND PLEATING (SEE ALSO OTHER HEADINGS, SUCH AS CREASES AND CREASE RECOVERY, CROSSLINKING, DURABLE PRESS, SETTING, WASH-WEAR)
Creaset process for permanent pants creases 7674
Creaset, fixes creases or pleats with silicone elastomer 5381
loss of pleats. causes, drycleaning precautions, repleating 6201
Saba Pleating System. micro-electronic control 8602

CREELS
Benninger thread tensioner model UZ for beaming of yarn from parallel creel 5846
braking system. tension control between creel section beam and size box 1734
DS-NC computer controlled direct warping machine and creel 3412
Hacoba model GRS unrolling creels for tape material 5831
ITMA [1987]. warp preparation 1737
K. F. company. technical and electronic innovations 254
Karl Mayer's direct warping units, type DS 5832
Karl Mayer's DS 65/40 direct warping installation 5833
Liba. product line catalog 5851
tensioners from Benninger for high speed processing 8241
tensioners, creels with controllable thread, for filament warping 4161
transport system, link, from Hamel 5749
two tier carriage creel, GW 2/2, from Mayer. specifications 990
unwinding, for Graflok carbon fiber. Texkimp 5834
Valentin Rius Clapers. product line 5826
warping creels manufactured by Benninger. tension control devices 3413
yarn assembling installation from Zell 4955

CREPESET IS A NYLON TEXTURED FILAMENT.

CRESLAN IS AN ACRYLIC FIBER.

CRIMP
Australian Shropshire wool fibers. role of nonkeratinous proteins in crimp formation 838
circular knitting machines, digital measurement of thread crimp at constant feeding rate 1785
crimp standards. hot air method and hot water method comparison 4663
determination, bulk testing standard from ASTM, Du Pont 8686
drawing. eliminating crimp by parallel orientation of fibers 3336
fiber crimp. effects on nonwoven fabric manufacture 349
polyamide yarns, stability of texturing effect 4958
weft. factors influencing variations 6667

CRIMPED COMPOSITE FIBERS, SEE MANMADE FIBER EXTRUSION AND UNDER SPECIFIC FIBERS.

CRIMPING (SEE ALSO OTHER HEADINGS, SUCH AS TEXTURED YARNS, TOW PROCESSING)
air blown. ability to give filament yarns the appearance of natural fibers 3381
air jet texturing conference. Loughborough University papers summarized 1711
air jet texturing. inlet pore diameter of guide needle and throat diameter of outlet passage analyzed 1708
false twist drawtexturing. steady state and transient threadline behavior 7383
false twist. polyester fibers, quick spun. spinning speed 4030
polyamide yarns, stability of texturing effect 4958
polyester fiber development in Pakistan. partially oriented, draw-textured yarn production developments 8069
texturing methods other than false twist. hot fluid, cold fluid 1713
texturing trends in India. process. end uses. development 1712
thermofixing of false twist, stretch textured, polyester yarns. crimping properties 4138
wool. process for extra loft in fibers. bedding applications 8004

CRIMPING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS TEXTURED YARNS, TOW PROCESSING)
air jet. interlaced yarns 8198
air texturing machine, AM4 from Barmag 4968
false twist. developments 3386
friction discs for texturing from Kyocera 8202
heavy duty wide band crimper from Nuemuenstersche Maschinen, uniform crimping without jams 923
ITMA [1987]. manmade fiber production equipment highlights 802
ITMA [1987]. texturing trends 963
noise damping on Scragg SDS-2 texturing device, system design by Polmatex-Cenaro 4137
stuffer jet crimper for bulked continuous filament carpet yarn 6609
texturing machine, RMT air jet. Staehle 4969
texturing trends in India. process. end uses. development 1712
yarn texturing technology featured at [1987] ITMA 3384

CROCHETING
Comez leadership in manufacture of crochet machinery. ITMA [1987] 8283
Comez machinery and devices. ITMA [1987] preview 235
Comez manufactures crocheting machines 4231
Comez series for special effect yarns, narrow fabrics, and apparel fabrics 7439
cotton knitting, stitch bonding, and crocheting machinery [1987] ITMA 2612
fiber artist Adrienne Cruz uses tapestry technique to make garments 5041
hexagonal yoke sweaters 1023
ITMA [1987]. crocheting and knitting machinery product descriptions 5901
ITMA [1987]. warp knitting machinery 5085
machines for crocheting from COMEZ, at ITMA [1987] 5042
new developments in machinery at ITMA [1987]. passementerie and medical items 6676
Spanish machinery review. crochet, trimmings, raising, dyeing, printing, medical textiles 1536
specialized knitting systems featured at [1987] ITMA 3455

CROSSLINKING (SEE ALSO OTHER HEADINGS, SUCH AS CREASING AND PLEATING, DURABLE PRESS, RESIN FINISHING, WASH-WEAR)
catalysts. studies on relationship to N-methylate finishing of cellulose fabrics 6141
cationic additives grafted to cotton with crosslinking agents made fabrics dyeable with anionic dyes 380
cellulose fibers. improved absorptive and retentive pulp 8044
cellulose. C. I. Direct Red 81 staining to observe crosslink distribution 7996
chemical fundamentals of finishing agents. durable press, crease resist 3657
composites with epoxy matrix and short carbon fibers under microwaves 7305
composites. anhydride-cured epoxy resin at carbon and graphite surface 1826
cotton printcloth. dyeability after crosslinking 3605
cotton treated with DMDHEU. pore structure 4485
cotton, easy care. modification of conventional treatments 1957
dimethylol ethylene urea treatment of cotton fabrics. effect of curing conditions 8545
durable press in cotton fabrics 4486
flock fibers. substrateless process 3502
hairiness of open end and ring spun yarns. effects of chemical treatment 3398
mixed catalyst system for durable press cotton fabrics 2784
modified resin for pretreatment of cotton and cotton/polyester blends before sublimation transfer printing 1244
optimum morphology for inducing crosslinks during hot drawing process 4064
polyethylene glycol. absorbency and wear bonded fabric 4299
polyethylene polypropylene blend films prepared by gelation crystallization from solution. crosslinking effect 1655
silk crosslinked with bis(beta-cyanatoethyl) disulfide 1617
soft gaskets. crosslinked by electron irradiation 8418
succinic acid-bis-n-vinylsulfide-anilide. improves various properties of wool 3658
TFE CP. crosslinking effects on thermo-mechanical properties 8041
thermo-oxidative crosslinking by torsional braid analysis for polyamides 8918
transfer printing with disperse dyes and high frequency electrical field 8533
ultra high modulus polyethylene. controlled crosslinking by electron beam irradiation 8104

CUPRAMMONIUM RAYON FIBERS
anti-bacterial cupra fiber from Ashai Chemical Industry 7315

CURING, SEE DRYING, DURABLE PRESS, PRESSING, WASH-WEAR.

CUTTING (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL MANUFACTURE, SHEARING)
aramid materials 2839
automated Eton 2002 system for optimal efficiency in cutting and piecing 7687
Bulgarian polyester and polypropylene geotextiles. properties and uses 4352
CAD/CAM system for most economical pattern cutting 7682
calculation of most effective, economical cutting, method 5371
computer program for computerized cutting systems 531
computer program to control fabric use, norms 5372
computers and microprocessors in dyeing and finishing 7553
cost containment strategies 3097
Dennison Cutting Room Optiplan. computer software, features 6183
East German computer program projects for optimizing patterning and material use in pattern cutting 3713
fabric dimensions standardized for efficient cutting. failure to consider actual production conditions evaluated 532
fabric placement and cutting. effects of number of layers 2016
high pressure liquid jet cutting of polymers. tests and parameters 6980
improved systems by computer program to calculate fabric dimensions 4544
instrument mapped pattern drafting system for garment cutting 2832
Invesmark and Lectra E19 Graphics Workstation. computerized plaid matching systems 2829
Joseph and Feiss and success with modular cutting 5370
Kuris High Tech System. computer integrated manufacturing 2837
laser cutting, mathematical model of laser's effect on woven cotton fabrics 533
laser cutting, nomogram of parameters for flax, cotton fabrics 6981
laying patterns for more efficient cutting of check fabrics 3716
layout yield compared to size of pattern 2017
Lectra Systems' conveyor and laser cutting system. advantages over fixed table systems 3715
methods for knit chemise fabrics to reduce fabric waste 534
pattern cutting. automatic cutting. Japan's TRASS developments 5348
pattern development for knit fabrics, efficient use and CAD accuracy 5373
plaid and striped fabrics. aligning pattern and pattern pieces 2833
plaid fabrics, design. cutting on the straight grain 4527
SG Cutting Service in Manchester, England. company operations and cutting process 2830
shirt patterns 2014
spreading. automating operations 2819
stabilizers used to maintain degree of polymerization in cellulose molecule 7989
Technical Development of Preparation for Automated Clothing Process, project. cloth stabilization, cutting techniques 6179
variations in synthetic fabric lengths. compensation by automatic cutting control systems 6184
Veit pinning table used by LaMar Manufacturing 2831
waste and error reduction for large and small apparel components 516
water jet cutting, effect on fabrics, control, mathematical modeling 4534
woven wool fabrics measurement. comparison of .2 meters and one meter cutting intervals 5374

CUTTING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS SHEARING MACHINERY)
automatic feeding system for cutting lines. Ateliers 8843
automatic. technological advances. areas of water jets, lasers, ultrasound 6982
Bobbin Show [1987]. cutting and marker making/grading equipment highlights 541
Bullmer automatic cutting system for apparel industry 3717

Bullmerwerk. folding and cutting machines 5380
CAD/CAM systems for apparel manufacture 5375
CAD/CAM systems shown at JIAM [1987]. cutting and spreading systems 2277
chain cutter, power AIR-KLIPP by Union Special. installation on 500 and 600 Series flatbed machines 2838
Computer Integrated Manufacturing system from Assyst 2282
computerized cutting systems shown at the Bobbin Show/AAMA Convention in Atlanta 8601
cutting methods for aramid materials 2839
Cybrid System for pattern making. Lefort installation for shirt manufacture 3718
diagonal cutting device by Mayer for transforming diamond shaped nets into square nets 1040
F. Calemard's ultrasonic equipment for fusing, cutting, and laminating 5392
fabric spreading equipment from Gerber for total automation of cutting room 2840
Flow Systems' intensifier pump in Waterjet and Waterknife cutting systems 2018
garment industry. affordability of cutting machinery. benefits. two case studies 4538
Gerber cutting machinery at Gruppo GFT 4530
Gerber Garment Technologies' Gerbercutters 4535
Gerber Garment Technology's improved product line. new attachments, more efficient electronic controls 4536
Gerber S93 cutting system at Fermark bra manufacturing company. system features and advantages 535
Gerber spreaders, cutters, unit production equipment, CAD systems 2835
Gerbercutter from Gerber Garment Technology 2834
German Assyst, cutting room computer systems control that integrates with other manufacturers' machinery 5376
home furnishings. technical advances 8605
industrial fabrics. making-up trends 6191
International Clothing Machinery Fair [1988]. faster, more efficient cutting machinery 4537
Invesmark and Lectra E19 Graphics Workstation. computerized plaid matching systems 2829
Investronica Matching System and Brisay America's matching machinery for plaid, striped and checked fabric 1281
Investronica Matching System. cutting and matching striped, checked, and printed fabric electronically 1518
Investronica's Matching System for automated cutting of patterned fabrics 1285
Investronica's Matching System for automatic cutting of patterned fabrics 2836
ITMA [1987]. garment manufacturing equipment highlights 8613
ITMA [1987]. making up and packing machinery 6185
knife lubrication device for sliver cutters 744
Kuris High Tech System. computer integrated manufacturing 2837
Kuris. computerized fabric inspection and cutting system 6186
laser. optical system for fabric cutting 4546
leather cutting. water jet systems, ISIN and Cyberg, features and architecture 2845
Lectra Systems' conveyor and laser cutting system. advantages over fixed table systems 3715
Meritina invests in Kuris Pioneer Super II spreading machines and cutting tables 5377
Model D6/5RS cutting converter from Schlumberger 3318
nonwoven fabrics. ITMA [1987]. machinery trends 6193
pattern cutting. automatic cutting. Japan's TRASS developments 5348
plasma torch cutting. non-transferred torch design 2019
product review of equipment in industrial fabric shops 537
RL-1000-1 and RL-1250-1 band knife cutters, production tests 536
Rollmaster strip cutter from Dado in British Columbia. variety of fabric widths and heights 5378
RORA produces machine line for processing textile wastes 3334
scissors for aramid fiber fabrics. Buntenbach and Sohn 2020
SG Cutting Service in Manchester, England. company operations and cutting process 2830
spreading. automating operations 2819
stamping out unit cuts knitted underwear fabrics in tubular form to shape 8603
staple fiber processes, update 890
ultrasonic cutting of pre-impregnated composites from Design Technologies 4539
Veit pinning table used by LaMar Manufacturing 2831
water jet cutting system from Flow Systems. diaper and automotive applications 1041
water jet, Aqua Jet system from New Tech Institute that cuts through Kevlar 6187

DACRON IS A POLYESTER FIBER.

DATA PROCESSING, SEE COMPUTERS AND PROGRAMMING, MANAGEMENT, OPERATIONS RESEARCH.

DECATING (SEE ALSO OTHER HEADINGS, SUCH AS STEAMING)
Contipress-MR-Process for woolen fabrics 493

DECATING MACHINERY
Conditec Superfinish-2 unit 6949 6950
Menschner's Contipress continuous decating system 6951

DECISION THEORY, SEE MANAGEMENT, OPERATIONS RESEARCH.

DECORTICATION, SEE DEGUMMING.

DEDERON IS A NYLON 6 FIBER.

DEFECTS, SEE CONSUMER ATTITUDES, DETERIORATION OF MATERIALS, FABRIC DEFECTS, IDENTIFICATION, NEPS, PILLING, UNIFORMITY, YARN IMPERFECTIONS, AND SPECIFIC PROCESSES.

DEFERRED CURE, SEE DURABLE PRESS.

DEFINITIONS, SEE TEXTILE TERMS.

DEGRADATION, SEE DETERIORATION OF MATERIALS, MICROBIOLOGICAL DEGRADATION, PHOTOCHEMICAL DEGRADATION, TEXTILE NUCLEONICS.

DEGUMMING
hydrolase used on silk fabrics 8455
mixed silk and nylon 66 fabric 8456
ramie. efficiencies of different auxiliaries 8169
ramie. lignin removal during degumming process 4916
reagents, influence on rate of dyeing with acid dye on silk 1958
silk, new detergents. testing 6090
silk. preparation, dyeing and printing. review 3607
silk. soap and synthetic agents 4070
silk. study for possibility of automation. laboratory results 6845

DELAYED CURE, SEE DURABLE PRESS.

DELUSTERING (SEE ALSO OTHER HEADINGS, SUCH AS LUSTER)

DEPILATION, SEE WOOL.

DESIZING (SEE ALSO OTHER HEADINGS, SUCH AS ENZYMES, SIZING)
Aquazym and Termamyl desizing enzymes from Novo. process description 1908
Babcock 3.4-millimeter continuous preparation range at Lonrho Textiles, singeing, desizing, scouring, bleaching 6844
control of chemical concentration 8454
cotton fabric preparation. faults in finishing 8235

cotton fabric, sodium sulfide, effects on starch 4406
cotton fabrics. alkaline processing 4405
cotton fabrics. preparation for dyeing 6089
enzymes. recommendations and findings of ACIT conference 6091
improved pre-finishing through desizing and extraction 2724
low solvent-assisted process combines desizing, scouring and bleaching 6826
machinery at Klopman's works in Frosinone 5538
Model LC Two Flow continuous rope washing machine from Brazzoli 5237
oxidative and other desizing systems. chemical developments 3569
pretreatment processes for cotton fabrics 3570
pretreatment range, computer controlled four-stage. Babcock 4410
Shockstream from ASISA. continuous open-width processing of woven cellulose fabrics 7568

DETERGENCY (SEE ALSO OTHER HEADINGS, SUCH AS DETERGENTS, LAUNDERING, SOILING)
calculated and visual evaluation values. correlation 3858
evaluation based on surface reflectance of fabric. gray scale, and color depth 569
foam washing of clothes, effect on air flow rate on detergency and cleaning ability. study 7011
natural residual soil distribution after laundering with detergent products 1295
surfactants. reactions with detergents. biodegradability 6389

DETERGENTS (SEE ALSO OTHER HEADINGS, SUCH AS ENVIRONMENT, LAUNDERING, SCOURING, SOILING, SURFACE ACTIVE AGENTS, WASHING, WASTE TREATMENT--EFFLUENT)
advances in silk degumming 6090
conference in Bergamo on surfactant derivatives 5545
containing brighteners, effects on colors 7007
detergents in drycleaning, chemical behavior, different types, functions 6997
electron microscopy analyzes commercial detergents. effectiveness in soil removal 4593
environmental concern. phosphorus levels in water 5546
fluorescent whitening agents in detergents. problems 2785
lipase additive tradenamed Lipolase, fat dissolving enzyme 2049
Lipolase from Novo Industries for detergents. low temperature use 7005
natural residual soil distribution after laundering with detergent products 1295
soil removal efficiency studied by EM 582
solvent power, Kauri Butanol method of testing. effect of detergents 7708
worldwide growth in recent years 7105

DETERIORATION OF MATERIALS (SEE ALSO OTHER HEADINGS, SUCH AS DISCOLORATION, FABRIC DEFECTS, FABRIC QUALITY, FIBER QUALITY, FLAMMABILITY, IDENTIFICATION, MICROBIOLOGICAL DEGRADATION, PHOTOCHEMICAL DEGRADATION, TEXTILE NUCLEONICS, AND UNDER SPECIFIC HEADINGS OF FIBERS, YARNS, AND FABRICS)
alkaline deacidifying agents. effects on historic and naturally aged cellulosic textiles 7932
AS3501-6 graphite/epoxy composite. degradation caused by overheating 6001
AS4/3501-6 carbon/epoxy laminates. failure 7845
azo disperse dyes. acetylation studies. thermal stability 8517
azo dyes. degradation by cell-free extract from var. 24B Aeromonas hydrophila 1226
carbon fiber reinforced polyether ether ketone composites. fracture characteristics 7491
carbon fiber reinforced polyether ether ketone. fracture behavior 8427
carbon/epoxy composites. testing for strength and lifetime 7821
cellophane. thermo-oxidative degradation studied via ultraviolet and infrared analysis 7294
cellulose fabrics. tears and holes when resins applied to stiff fabrics 7712
cellulose films. calculating destructive stress at break 7318
composites with polymer matrix 7500
composites, metal matrix. accelerated aging 8356
composites, short fiber, using small diameter fibers. effect on properties 8371
composites. compressive failure of fiber-reinforced composites with brittle, weakly bonded constituents 8366
contour plotting displays mode shapes of free vibration and buckling in composite plates 8354
copolyester textured yarns compared to polyester for extension stress 8112
cotton. cellulose degradation during prolonged heat treatment 3558
cotton/wool blends. reducing damage to wool component during reactive dyeing 4435
cracks in polyester fibers. chemical action of spin finishes 6556
curcumin colorant. electrophilic breakdown by ozone 8917
damage to cellulosic fibers due to resin finishing. appearance 4585
effect of late season rain on [1984] cotton crop in Mississippi Delta 7992
fading and degradation of dyed wool fabrics caused by ultraviolet light 7549
fiber composites. tensor transformations and failure criteria 8355
geotextile separator fabrics examined for progressive deterioration in road use 7770
glass fiber reinforced polyester laminates. fatigue damage 8735
graphite/epoxy composite. thermal damage effects on delamination toughness 7497
hindered amines protect polyolefins against photooxidation 7923
IITRI Compression Test evaluation 7819
impact resistance of polypropylene reinforced concrete 8738
isotactic polypropylene extruded at varying temperatures. aging 7343
Kevlar 49/epoxy laminates. bending response of beams and rings 8358
Kevlar under physical stress and nitrous oxides 8020
knit-lines in short fiber reinforced plastics. impact fracture mechanics analysis 7344
linen. effects of heat-induced aging on color, tensile, abrasion, dyeability 7476
lint cleaning cotton. strength and fineness related to damage 7272
matrix cracks in laminates as a function of time 7847
metal-containing polymeric dyes control polymer degradation 4466
Mode III interlaminar fractures. split cantilever beam and edge delaminations 7820
multi-angle carbon fiber/polyetherether ketone laminates. fatigue testing 8736
needle deterioration and relation to open end cotton yarn properties 4222
nylon 6 fishing net after exposure to ultraviolet light 5814
optical fiber. application in testing strain and damage in woven glass epoxy composite 8731
osmotic blistering of glass fiber products in continuous contact with water 1052
peracetic acid decomposition in bleach solution 2722
PET bristle used as a model for fatigue and wear in tire cord 8698
polyacrylonitrile. effects of sulfur dioxide and nitrogen oxide 8393
polyethylene succinate block copolymers and biodegradation properties 3304
polyethylene. oxidation behavior due to gamma radiation and ultraviolet light 8101
polymer composites. sliding and abrasive wear 7825
polymer matrix in composites. role in interlaminar crack growth 7310
polyolefins. photodegradation reduced by hindered amines 5701
Quality Control International. light fading and colorfastness testing 2213
random short fiber composite. fatigue damage evolution and associated anisotropic elastic property degradation 2642
sheet molding compounds. corrosion behavior in water 4349

silk evaluated with scanning electron microscopy, energy dispersive X-ray spectrometry, and dye analysis 7283
silk. thermal and photochemical degradation 7275
smoke point in spin finishes. ICI's G-1089 and G-1043 compounds with higher smoke points 8151
strength degradation of Kevlar 49 due to stress and nitrogen oxides 4850
synthetic poly(alpha-amino acid) fibers. enzymatic degradation 2472
tensile deformation model for polymers 8676
tensile strength of fabrics used in uniforms after repeated laundering 1836
textile painting, history. fabric deterioration, protection of pictorial layers 5188
textile restoration, preliminary examination, conservation treatments 5105
thermal decomposition of nylon 66 investigated by direct pyrolysis 906
thermo-oxidative stability of Celion 6000 graphite fiber, PMR-15 matrix resin, Celion 6000/PMR-15 composites 8357
ultraviolet stabilizers used to reduce fading and degradation of museum textiles 5202
variation of local compliance in cracked graphite fiber reinforced polyimide composite specimen 7510
viscose film spinning into sulfuric acid precipitation baths. decomposition of cellulose xanthate 4845
yellowing of white or pastel fabric. causes and preventive measures by drycleaner 4576

DIAPERS (SEE ALSO OTHER HEADINGS, SUCH AS DISPOSABLES, HEALTHCARE AND MEDICAL TEXTILES)
absorbent characteristics of nonwovens. fluids 6076
Acumeter Coating/Laminating Tape system. refastenable diaper tapes 2954
adult diapers treated with copper acetate. tested for odor and bacteria problems 674
adult incontinence products. European market 589
advertisements, information from suppliers of nonwovens machinery, raw materials, fabrics, and converting services 5148
barrier films, monolithic breathable 6055
brands. private label versus national 1357
Celatose company profile. private label diaper manufacture 2955
disposable diapers, first and second generation, from Uni-Charm. Japanese markets 1837
disposable incontinence pads. coverstock effects on skin 7727
EDANA Nordic Nonwovens Symposium [1988]. technology, fibers, markets. superabsorbent polymers 6621
elastics. nonwoven fabrics 6058
Fibersorb superabsorbent nonwoven web. nonacrylic-based resin 6016
Fibersorb, superabsorbant fiber for diapers, produced by ARCO Chemical 8057
film suppliers and diaper manufacturers. problems and trends 2956
hot melt application. diaper construction. hygiene absorbent products 294
incontinence market. current and future. manufacturing overcapacity 592
incontinence pad coverstocks and effects on patients' skin. softness and hand of different coverstock materials 7745
incontinence products, marketing for textile rental industry 5443
incontinence products. liquid distribution mechanisms. product market 295
Japanese diapers market. materials. technology 588
Japanese production and expansion plans in nonwovens fabrics manufacture 4773
Kimberley-Clark develops new elastic diaper cover 6223
liquid distribution mechanisms of hygienic products 296
manufacturing and market share statistics [1987] reviewed. innovations 2957
manufacturing strategies for disposable diaper market 3079
microclimate. simulation 3037
multilayer diaper coverstock, current technology, expectations, DryTouch Huggies 6017
nonwoven fabrics. growth opportunities 6018
nonwovens. important factors for those considering entry into United States markets 5147
patents obtained for elastic waistbands on baby diapers 593
Proctor and Gamble incorporates pH control agents in diapers to combat diaper rash 7719
rash. disposable and cloth diapers 6034
Sharnet's nonwoven, non-adhesive webs for incontinence products, diapers 2615
super absorbent polymers. suspension polymerization, gel polymerization. diaper manufacturing in Japan 297
superabsorbent polymers, manufacture and applications, future expansion 1086
superabsorbent polymers. North American market 2973
Swedish Chemicals Inspectorate recommends ban on diapers containing wood pulp bleached with sodium chlorate due to dioxin presence 3948
testing performance characteristics 4691
thinner products. super absorbent materials. factors affecting product quality 300
United Kingdom market. Boots brand range. Boots' marketing strategy 591
waistband constructions. plastic patch and barrier coating 1358
waistbands. hot melt moisture barrier coatings 1359
water jet cutting system from Flow Systems. diaper and automotive applications 1041

DICTIONARIES, SEE BOOKS, DIRECTORIES, TEXTILE TERMS.

DILANA IS A POLYESTER FIBER.

DIMENSIONAL STABILITY, SEE SETTING, SHRINKAGE, SHRINKPROOFING, AND UNDER SPECIFIC KINDS OF FABRICS.

DIOLEN IS A POLYESTER FIBER.

DIRECTORIES (SEE ALSO OTHER HEADINGS, SUCH AS ANNUAL REVIEWS, BOOKS)
Adhesives Age Directory, twentieth edition 4153
American Laundry Digest Buyers' Guide. manufacturers, products 5401
area rug manufacturers of machine made rugs. alphabetical listing with addresses, and product description 645
ATI directory for United States and Canadian textile machinery industries 7968
Australian and New Zealand manufacturers and suppliers 1551
Bobbin's annual survey of apparel industry software suppliers and directory 6171
British dyers and finishers directory (Book) 8921
BTMA [1988] Directory of members and products 1587
buyer's guide to dyes, pigments, chemicals, and machinery 8476
Buyer's Guide to manufacturers, suppliers, services, products 8975
Buyers' Guide for machinery manufactured in Federal Republic of Germany and West Berlin 3941
buyers' guide for United Kingdom textiles 3182
Canadian Apparel Manufacturers, [1988] listing. product categories, locations included 5356
Canadian Textile Journal's textile manufacturing product directory 8927
Carpet and Rug Industry [1989] Buyers' Guide. suppliers, service organization to carpet industry 8658
Chemical Week [1989] Buyers' Guide 8926
chemicals and auxiliaries. companies and properties and applications of chemicals 1207
chemicals. trade names and manufacturers 7240
dictionary. chemicals and reactions in textile industry 3183
Directory of Reupholstery Resources [1988], alphabetical and regional listing 6253
distributors directory. state-by-state listing of companies distributing laundry equipment, supplies, other goods and

services 2866
dyeing and finishing companies in United Kingdom 6811
dyes and chemicals. dictionary of trade names 7622
dyes and related chemicals. trade name dictionary 7612 7623
dyes. companies and applications and properties of new dyes 1208
embroidery, pleating. Buyers Guide to machinery and services 538
equipment and supply companies for fiber artists 1588
equipment, supplies, services for drycleaning industry 2054
Fairchild's Textile and Apparel Financial Directory [1988] 8922
Fairchild's [1987] textile and apparel financial directory 1555
fiber producers in United Kingdom 1696
flame retardants. buyers' guide 1904
garment and paddle dyeing machines 7605
garment drying machinery 6956
geotechnical fabrics. products guide and industry directory 1087
hosiery manufacturing product guide. alphabetical by products and manufacturers 7469
hosiery, outsize. buyers guide, [1988] resource listings 5114
INDA/EDANA [1988–1989] nonwovens directory 7972
Industrial Fabric Products Review. new product showcase, international 3486
industrial fabrics and related industries. [1988] Buyer's Guide 2671
interior textiles industry [1988] annual industry directory 8650
international manufacturers of dyeing and finishing machinery 5164
ITMA [1987]. directory of exhibitors 2307
knit apparel contractors 1361
knit apparel manufacturers 1360
knitting machines. survey of manufacturers and importers 4239
label manufacturers in United Kingdom 2034
Latin American textile industry [1988/1989] directory. products, suppliers, sales representatives 7245
legwear, men's underwear. [1988] buyer's resource guide to designer names, licensees 2970
licensing support suppliers directory 5345
list of manmade fibers. fiber type, manufacturer 6520
local product source directory [1988] for floor coverings and related supplies and services 2174
manmade available to nonwovens roll goods manufacturers. buyers' guide 6518
manufacturers. providers of services for drycleaners. [1988] buyers guide 2853
marine buyer's guide. product directory 4367
marine buyer's guide. supplier directory 4366
narrow fabric industry, manufacturers and suppliers 6793
nonwoven roll goods. buyer's guide 5149
nonwovens industry. advertisements, information from suppliers to industry 5148
nonwovens industry. [1988] buyers' guide 6619
pantyhose resources, styles, retail prices. Buyer's Guide 8640
Plastics Directory [1988]. products, tradenames, suppliers 1838
products and services to carpet and rug industry. annual Carpet Exposition in Print 3003
raw wool and tops, woolen and worsted yarns and fabrics, carpet manufacturers, dyers, and finishers in United Kingdom 7246
resources for floor, wall, other interior surfaces, Flooring's [1988] Directory and Buying Guide 2004
sheep breeders association listing 7286
South African manufacturers of textile machinery, fibers, yarns, and chemicals 3988
specialty and high performance manmade fibers 5629
spunlace fabric manufacturers 4291
suppliers to nonwovens industry 8350
synthetic turf directory of manufacturers of indoor/outdoor carpet 2166
textile chemicals, dyes, and agents. listing of trade names 7248
textile chemicals. trade names 7247
textile companies, manufacturers, dealers, brokers, agents, designers, schools, associations 3180
textile dictionary. chemistry 3184 3185
textile machinery, equipment, and chemicals. international buyers' guide 7252
Textile World Buyer's Guide to worldwide manufacturers and suppliers of textile machinery, equipment, supplies, services 7188
trade name listing for textile chemicals 7241
United Kingdom Buyer's Guide. yarns, tops, raw materials, specialty fibers 3181
United Kingdom Directory of Fibers, Filaments, and Yarns 1584
Western Europe converters and manufacturers directory 8412
Wool Record buyers' guide to suppliers and manufacturers 2440
yarn and fiber buyers' guide [1988–1989]. product and supplier listings 6617
yarn directory of carpet fiber producing companies [for 1988]. addresses, products, markets 4071
yarn producers in United Kingdom 1697
yarns used by United Kingdom knitting sector 6618
yarns, tops, raw materials, and specialty fibers manufactured in United Kingdom 2538

DIRECT SPINNING, SEE SPINNING, TOW PROCESSING.

DIRT, SEE SOILING, STAINS.

DISCOLORATION (SEE ALSO OTHER HEADINGS, SUCH AS BLEACHING, COLOR MEASUREMENT, FABRIC DEFECTS, PHOTOCHEMICAL DEGRADATION, STAINS)
red azo dye. effects of ammonium salt containing flame retardants on discoloration 3590
wool bleaching with thiourea dioxide 8451
wool. influence of pH on reflectance and photostability to sunlight 1950
yellowing in cellulose fibers caused by nitrogen and oxides. problems in storage 6275

DISINFECTION, SEE ANTIBACTERIAL AGENTS, GERMPROOFING.

DISPOSABLES (SEE ALSO OTHER HEADINGS, SUCH AS DIAPERS, FABRIC PRODUCTS, HEALTHCARE AND MEDICAL TEXTILES, NONWOVEN FABRICS, PAPER, SANITARY NAPKINS AND TAMPONS)
adult incontinence pads. market analysis 1363
adult incontinence products. European market 589
adult incontinent products and their market 2959
adult incontinent products, refinements, market expansion 2960
advertisements, information from suppliers of nonwovens machinery, raw materials, fabrics, and converting services 5148
bacterial barrier properties of surgical drapes and gowns, face masks, instrument tray wraps 1106
cotton and nonwovens compared when used in operating room drapes, surgical gowns 1109
diapers, first and second generation, from Uni-Charm. Japanese markets 1837
Ecolan and Ecostar, disposable, biodegradable material. Ecolan products, applications, biodegradation process 6053
EDANA Nordic Nonwovens Symposium [1988]. technology, fibers, markets. superabsorbent polymers 6621
European Community integration process. challenges and opportunities for nonwovens manufacturers 4987
European market. advertising and design of superabsorbent products 1362
Fehrer Type K21 random card for nonwoven medical textiles and disposables 5733
feminine hygiene products market, demographic trends 2991
fiber, virgin or reclaimed. volumetric feeder for use in soft disposables industry from Osprey Corporation 3922
film suppliers and diaper manufacturers. problems and trends 2956
Flexi-Spray applicator and flow monitor for application of performance compounds 1800
hot melt application systems. melting/metering, applying. new coating method 347
hot melt application. diaper construction. hygiene absorbent products 294

hygiene products. functions and requirements of spin finishing 299
hygienic products, thermally bonded absorbent core technology 1881
incontinence pad coverstocks and effects on patients' skin. softness and hand of different coverstock materials 7745
incontinence pad coverstocks. effects on skin 7727
incontinence products. liquid distribution mechanisms. product market 295
incontinence products. standards. correlating technical tests with user trial data 6765
incontinence. circumstances making it difficult for consumers to get assistance or products 594
incontinence. problems and products, research, patient support, reimbursement programs 2961
Japanese diapers market. materials. technology 588
Japanese production and expansion plans in nonwovens fabrics manufacture 4773
Kimberley-Clark develops new elastic diaper cover 6223
latex binders, binding techniques for disposable nonwovens 5960
liquid distribution mechanisms of hygienic products 296
management performance in disposables operation. two scenarios contrasting management systems 5517
medical textiles in French hospitals. costs, attitudes, advantages 1114
Molnlycke acquires Ancilla BV and Peaudouce, becomes leader in European personal hygiene market 2958
nonwoven spunlace fabrics. medical applications 1113
nonwoven surgical gowns. requirements, advantages over wovens 1112
nonwovens in wound management and other patient care applications. supporting devices, masks, dressings, gowns, drapes 1115
nonwovens. important factors for those considering entry into United States markets 5147
patent applications. diapers and feminine hygiene and incontinence products 2962
Proctor and Gamble incorporates pH control agents in diapers to combat diaper rash 7719
Rextex. microporous polyethylene film developed by Consolidated Thermoplastics 1056
Saff, superabsorbent fiber-flock based on polyacrylate. applications 298
shop towels versus disposables in industrial wipes market 2155
Swedish Chemicals Inspectorate recommends ban on diapers containing wood pulp bleached with sodium chlorate due to dioxin presence 3948
T550 thermally bondable fluff pulp from Weyerhaeuser. absorbent core material 1839
thermally bondable pulp. T550 blendsheet. KittyHawk. advantages 6747
thermobonding thermoplastic fiber to superabsorbent polymer cores. absorbency, wicking 1364
thermobonding units from Fleissner and Scandimex. use of synthetic pulp blends for disposable hygiene products 2625
thinner products. super absorbent materials. factors affecting product quality 300
wipes. nonwoven wipes industry in United States 1069
woven and nonwoven materials used as effective barriers to bacteria 1117

DOFFING AND PIECING
Hacoba model NHZ automatic direct warper 5848
hairiness, yarn. sources 6566
Innovatex transport systems. sliver cans, rovings, and cones 5724
Scaglia's Robot Automatic Doffing system 5755
speed frame doffer, type 660. Zinser 5725

DOFFING MACHINERY, SEE UNDER SPECIFIC MACHINERY, DOFFING AND PIECING.

DOPE DYEING, SEE DYEING PROCESSES.

DRAFTING (SEE ALSO OTHER HEADINGS, SUCH AS SPINNING)
doubling and draft distribution. effect on yarn quality 6567
faults in carded ring yarns 6568
fiber migration, longitudinal, in roller drafting 125
jute. drafting tenacity 5615
jute. irregularity in drawing slivers 5726
ringframe. spindle to spindle variables and yarn quality 6569
sliver drafting in gill box. measurement of drafting force 8159
sliver uniformity. beta adjustment technique 8158
top arm wear and yarn quality 6570
Unilap combing preparation process. single and overall doubling 932

DRAFTING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS DRAFTING ROLLS, GILLING MACHINERY, ROVING, ROVING MACHINERY, SPINNING MACHINERY)
apron cradle, bottom, from SKS 4119
Asselin fifteen roller web drafting system 934
cotton samples. microspinning and bulk spinning performance 3350
drafting force metering instruments. DDL Tester from Spinlab 936
fluff accumulation on top clearer pads. problem and solution 3335
GC series of drafters, FM-7A rover for wool fiber, performance evaluation, operational recommendations 4086
GC-13 drafter, PB-29 LF comber, worsted system, sliver quality 126
gill box, GV 10. Schlumberger 8145
intersecting drawing frames from LAWER 8160
ITMA [1987]. automation in spinning processes 4099
L2-50-155 drafter for manmade fiber tow, dense sliver packing 127
multi-head. toothed-disc roller drafting mechanism. Model SH. Sant'Andrea Novara 8161
Rieter's D 1/2 drafting frame. Unilap system 4909
Saurer-Allma's Single-Line drafting system for hollow spindle fancy yarn doubling machines 5784
short staple spinning. a practical guide to combing and drawing from the Textile Institute 929
SKF. individual motor drive system. bottom apron cradle and stop motion 5737
top arm drafting system modified to improve yarn quality 5791
yarn quality on different ring frames and drafting systems 142

DRAFTING ROLLS
Asselin fifteen roller web drafting system 934
fluff accumulation on top clearer pads. problem and solution 3335
ringframe. spindle to spindle variables and yarn quality 6569

DRALON IS AN ACRYLIC FIBER.

DRAPERIES, SEE FABRIC PRODUCTS, HOME FURNISHINGS.

DRAWING (SEE ALSO OTHER HEADINGS, SUCH AS GILLING, SLIVER, SPINNING, UNIFORMITY, YARN PROCESSING--FILAMENT YARNS)
Bibb Yarns. GC-12 Chain Gill drawing machine from Schlumberger. reduced costs, increased product quality 2503
cold drawing of ultra high molecular weight polyethylene gel fibers 8100
draw-sizing compared with warp-drawing. quality and costs 8237
draw-sizing undrawn or partially drawn nylon and polyester yarns 6140
drawing. influence on crosslinking efficiency for radiation in ultra-high molecular weight polyethylene 4064
faults in cotton yarn processed on drawing frame type A272F. rotating and fixed pressure bars compared 106
fibers. eliminating crimp by parallel orientation 3336
flat filament yarns. orientation and crystallinity 4026
jute. irregularity in drawing slivers 5726
McCoy-Ellison develops draw-warping system 8236
Neumag. new spinning and processing lines 5758
open end yarn quality. effect of number of draw-frame passages 6571

polyacrylonitrile thermal processing, oxidation levels 5723
polyester, shrinkage increased in the drawing stage, decreased in the finishing stage 4896
polyester/cotton yarn. differences in blending before carding and before draw framing 8146
preoriented polyester yarns, structure and dyeing 4028
recent developments. automation in spinning processes 7369
textured yarns, unwinding behavior 5809
Uster Sliverdata from Zellweger Uster. continuous monitoring 4926
warp drawing process for flat filament yarns 4993
warp-draw-sizing process. Mayer-Sucker + Mueller unit 5835

DRAWING-IN, SEE WARPING.

DRAWING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS COILING MACHINERY, DRAFTING ROLLS, GILLING MACHINERY, SLIVER)
air twisting of triacetate/nylon yarns, machinery, method 152
Autoleveller RSB 51, SB 52 from Schubert & Salzer 4120
Barmag draw warping and draw sizing machinery for polyester yarns 8135
Barmag. spin-drawing, texturing, and winding machinery 5668
Barmag/Tsudakoma draw sizing line, specifications 935
Bibb Yarns. GC-12 Chain Gill drawing machine from Schlumberger. reduced costs, increased product quality 2503
cylinders. measurement device for pressure 8163
Dobson-Barlow HDP/3 and Rieter J5/10A draw-twisting machines. converted into draw-winding machines 4133
draw-winding machine for medium-heavy deniers. Riecord J3/10 from Rieter 8162
draw-winding, GZF take-up unit from Schweiter 4952
Drawframe RSB 51 draw-texturing machine. United States production 5802
false twist draw texturing machines displayed at ITMA [1987] in Paris 1715
faults in cotton yarn processed on drawing frame type A272F. rotating and fixed pressure bars compared 106
Fleissner. manmade fiber production machinery 5743
Karl Mayer. draw-warping and sizing system 5836
polyester yarn beams, fully oriented. Karl Mayer draw-warper 8247
polyester yarn manufacture, industrial, Rieter J 3/10 draw-winder for optimizing 8141
production technology seen at ITMA [1987] reviewed. filament yarn manufacture 944
Textima's 3008 and 3010 draw twisters 5756
texturing machinery. innovations at ITMA [1987]. management and control 6604
texturing, draw, from Rieter 5806
VEB Kombinat Textima, textile machinery. drawing, spinning, knitting models 7189
warp-draw-sizing and warp-draw systems from Val Lesina 189
wet drawing systems for synthetic fibers from Val Lesina. feedstocks and production costs 2548
Zinser draw twisting and draw winding machinery. high production speeds 6578

DRAWSTRETCHING, SEE YARN PROCESSING--FILAMENT YARNS.

DRAWTWISTING, SEE YARN PROCESSING--FILAMENT YARNS.

DRAWWARPING, SEE YARN PROCESSING--FILAMENT YARNS.

DRIVES (SEE ALSO UNDER HEADINGS OF SPECIFIC MACHINERY)
carder cylinder drive gear. design, control 4083
flexural vibrations, computer analysis, design of machinery and drive 7171
geometric design of drive gear between two spindles 5527
six-link drive gears with aligned coupling, kinematics, program, design 5043

DRYCLEANING (SEE ALSO OTHER HEADINGS, SUCH AS LAUNDERING)
acetone cleaners and acetate fabrics 2051
advances in fully automated steam-air garment former for drycleaning and finishing machinery 6204
advantages of electric drycleaning units over steam. costs and maintenance 2047
AMA Universal's M series of perchloroethylene drycleaners. for processing flexibility 4568
animal fibers and drycleaning 2434
apparel made from metallic fabric, common problems 2854
apparel with trim, spot testing with solvents 570
apparel, international textile care labeling symbols 3735
apparel. spots, adhesive residues from stickers on labels, brought out in drycleaning 4594
application of commercial ink or dye remover to stained acetate fabric, consequences 5394
applying water repellent finishes, procedures 5315
Austrian laundering, drycleaning trades. history 3734
Austrian laundry, drycleaning industries. history and development 5592
batch and bath drycleaning operations. differences and modifications 6205
buyers guide [1988]. manufacturers. products and services 2853
buyers' guide to firms serving South African industry 2865
buyers' guide to South African services 6206
candle wax and oxidized oil stains removed from some table linens with heated perchloroethylene 571
care procedures for finishes and trims 6081
care procedures for silk and cashmere 6995
career wear for men and women. garment rental industry markets drycleaning service 8755
changes in drycleaning industry, coping in the nineties 7698
cold pressing technique from West Germany. technique and processing details 2855
computer applications of accounting, energy control production, equipment monitoring 2048
computer equipment for drycleaning and laundering companies 3911
Control of Substances Hazardous to Health regulations and effect on British drycleaners. regulation of perchloroethylene 6215
cotton and wool. removal of aged oily stains 2052
cotton/leather combinations, problem with cleaning trim. possible solutions 6996
crepe fabrics, preventing shrinkage, preserving the crinkle 572
customer complaints, effective handling by launderer and drycleaner 3876
damage to apparel. restoration procedures for blistered fusible interlining after drycleaning 4569
deep pile trimmed garments. cleaning and finishing procedures 7699
definitions of drycleaning wash systems 2053
detergents in drycleaning, chemical behavior, different types, functions 6997
developments, machinery, solvent recovery technology, computerized control. review 1296
directory of equipment, supplies, and services for drycleaning industry 2054
Dowclene LS versus perchloroethylene, study of drycleaning solvents proves satisfactory 6994
down-filled coats. removing splotches caused by solvents 2055
equipment for large laundry operations, Laundry and Cleaning [1988], ironers, washers, finishing equipment 6216
felting shrinkage, procedures to avoid this when drycleaning wool garments 4570
fluorocarbon solvents for dyes and finishes requiring milder solvents 7700
fragile garments, wetcleaning procedures 7701
furniture fabrics coated with latex on reverse side. coating dissolved by some solvents 7702
fusible interfacing separating from outer shell fabric. appearance, causes, prevention, remedy 2056

garments with dark spots on shoulders caused by spillage of hair sprays, removal procedures 2058
garments with leather trim, drycleaning problems and suggestions 2057
gas chromatographic testing for perchloroethylene traces in strip cleaned air from drycleaners 5471
German environmental statutes and drycleaning practices 2050
heat sensitive filling material used in quilted articles. damage during cleaning 2075
hydrocarbon gas safety testing apparatus from Draegerwerk 3859
improvement of solvent mileage in drycleaning facilities, benefits and methods 4571
industrial laundering, move to laundering from drycleaning. reasons 6207
industry, Austrian [after 1945]. general history 4783
industry. environmental hazards cause ban of volatile chlorinated hydrocarbons 4577
intensifiers. uses in drycleaning process 3736
jacquard fabrics, problems and methods of drycleaning, spotting, and finishing 4572
Laundry and Cleaning [1988]. continuous batch and dual solvent machines 6202
Laundry and Decontamination Drycleaning System (LADDS). effectiveness 7710
Laundry and Drycleaning [1988] exhibition. new drycleaning equipment with various solvent systems 6203
leather cleaning care procedures for trims, avoiding damaging heat and moisture 4372
leather trim, loss of design. causes 6998
limpness in Ultrasuede garments, effects of wear and cleaning on the fabric and separation of fusible interfacing 3737
linen. removing wrinkles, studying limp fabric after several cleanings 573
load factors, effect on cleaning performance test 574
loss of pleats. causes, drycleaning precautions, repleating 6201
matte jersey, drycleaning hints and challenges 2059
mechanical action related to processing parameters 2856
mechanical actions and how they relate to laundering and drycleaning solvent/water levels 4573
moisture, effect on velvet fabrics. care procedures 6999
occupational requirements. laundering versus drycleaning 3738
oily stains, aged, removed from dyed and undyed cotton and wool 585
palazzo pants. special finishing with pants topper, hand iron, or steamed out 7703
perchloroethylene and its future in the drycleaning industry 7704
photoyellowing caused by retention of chlorinated solvents used in drycleaning 3752
pigment printed fabrics, color loss due to drycleaning solvents. manufacturer's responsibility 5395
pilling in low twist yarns. temporary solution to improve garment's appearance 5396
pleat loss, reasons. drycleaning procedures 5397
pleated garments, drycleaning care. how to cope with loss of pleats 2060
polarity of substances in stains. appropriate solvents 3748
pollution standards, West German, create problems for launderers and drycleaners 3950
polypropylene, increased use in carpets. care instructions, properties 7025
prespotting. when it is required 7705
problems and care procedures to be used when handling ties 4574
procedures to prevent loss of pleats 5398
process control system from Ramisch Kleinewefers for calenders with Nipco rolls 7651
rayon fabric. spotting problems and solutions 575
rayon fabrics 6208
removal of oily stains. alcoholic potassium hydroxide solution 3739
removing chloride salts from silks 3740
resin finishing for cellulose fabrics. problems of resin damage and solutions 4575
salt and pepper fabrics, problems with cleaning. causes and recommendations 7706
separation of metallic foil trim from backing, problem due to adhesive in garment construction 6209
shirts. one hundred percent cotton. pinstripes and oxford, failure of reactive dyes during cleaning 7000
silk, weighting process reduces fiber strength and tears are often unavoidable when cleaned 4136
snakeskin trim. drycleaning precautions 7707
soil removal, factors affecting 2061
solvent filtration with single plate, single charge rotary whirling filter by Boewe for drycleaners 6213
solvent odors. causes and solutions 576
solvent power, Kauri Butanol method of testing. effect of detergents 7708
solvent properties compared 6210
solvent. mixture of mineral oil and solvent can reverse chafing of silk caused by moisture and friction 4482
solvents and vapors may result in neurological damage with symptoms similar to Alzheimer's disease 1538
solvents compared 8618
solvents in drycleaning. recycling and limiting environmental exposure 3951
solvents, effects West German environmental laws on the industry. recycling developing less harmful solvents 4755
solvents. German research to protect the environment 7671
solvents. safe and legal concentrations of chlorinated, fluorinated and halogenated organic solvents in environment 3741
specialty hair and fur fibers, drycleaning precautions and procedures 7001
spotting procedures for silk. types of stains, wet and dry spotting, alkaline color changes 6211
spotting unidentified stains 587
stain removing agents and methods 1300
steam trapping system 6219
sweaters, chenille-like, loss of pile due to fabric construction, when subjected to cleaning, abrasion 4599
trends in drycleaning equipment. hand pressing and automatic pressing machinery 2857
trichlorotrifluoroethane (R113) versus perchloroethylene as drycleaning solvent 2858
upholstery fabrics, precautions for drycleaner 7709
vanishing pinstripes and loss of colored yarns in men's oxford shirts. causes, alternate solutions 7002
variance in colorfastness in combination cloth and leather garments after cleaning 3733
vein marks on leather. causes 7003
ventilation, cooling in a drycleaning plant, health and productivity of employees 6380
ventilation. emission and waste heat removal 3952
wastewater. alkaline. Buse System of acidification 4762
water soluble soil, difficult to remove. effect of moisture on drycleaning system 7004
weak spots in woven material attributed to smooth yarns and not to the launderer or consumer 3742
West Germany. regulating solvents and other chemicals used in drycleaning 3949
wetside spots, removal instructions. acid-type stains 1297
wool fabrics. effects 2859
woolen and worsted wool apparel 2860
yarn and seam slippage. contributory factors, drycleaning procedures 6212
yellowing of white or pastel fabric. causes and preventive measures by drycleaner 4576
zipper sticking, how to avoid when drycleaning 5399

DRYING (SEE ALSO OTHER HEADINGS, SUCH AS MOISTURE PHENOMENA, SLASHING)

Andar Unidryer. performance with dyed loose wool 8565
causes of yellowing in yarn packages during RF drying 6952
commercial cotton gin drying systems. current research and potential for improvement 6438

computers and microprocessors in dyeing and finishing 7553
convection and radiation. comparison of methods 8562
convection and radiation. quantitative investigation 4501 6953
cotton ginning. new and improved machines for drying, cleaning and ginning 6441
de-watering carpets, Kuesters variable slot suction tube 3670
digital control for sizer drying area. temperature, speed, moisture in warp 5000
Fastran Cool Dry system based on dielectric heating 6955
Fastran Cool Dry. drying cones of wool dyed in grease with accurate moisture regain, at low temperatures 2302
Fifth International Symposium on Drying, proceedings. drying theory, wood, paper, granular material drying 7962
Fifth International Symposium on Drying, proceedings. industrial systems, solar energy, dewatering, moisture control 7961
Fifth International Symposium on Drying, proceedings. supplemental papers on theory, energy, foodstuff drying 7960
gin drying system. fundamentals of moisture removal from cotton. drying mechanisms 6443
infrared predrying processes and Monfort's machinery 4502
infrared predrying, theory and practice 8563
infrared radiation through gas combustion for drying after pigment dyeing 8510
intermediate. two bath method. vacuum extraction as alternative 424
ITMA [1987]. thermal treatments. quality and flexibility 6079
latex-backed carpets. drying and curing 1417
low wet pick-up. vacuum extraction. India. industrial applications 6818
methyl cellulose combined with crosslinking agent on cotton printcloth for restricting migration during drying 7646
Model S 1426 dryer from NEU 5206
Modular hank yarn drying range from Galvanin 5319
oven drying coatings on webs. increased hot air speed in dryer. Glenro 2796
papermaking press felt seam. stronger flap in drying 8421
polyester textured woven and knitted fabrics. processing sequence 6820
radio frequency drying of sized yarns. study results 2560
radio frequency drying of warp yarns in sizing process 1982
radio frequency drying polyester/cotton warp yarn in sizing process 5837
radio frequency drying. developments at Textile Technology Forum 1796
radio frequency energy for drying sized yarns of polyester/cotton 8564
spray drying of dyestuffs and pigments 2705
stage of sizing. new method reduces yarn tension, eliminates stretching 4997
Streat Moisture Meter measures regain of loose wool emerging from dryer 8461
textile drying mechanisms. cylinder drying machines. construction, design, capabilities, accessories 7657
Thies introduces T150 batchwise and T300 continuous tumbler dryers 3672
tower drying systems for cotton. improved drying efficiency 6457
towerless seed cotton drying systems. new devices and arrangements. advantages 6458
triacetate fibers, movement with oscillating air fluidized bed 494
tumble. process for industrial mat laundering that precludes drying 3744
vacuum extraction. technical and economic benefits 8569
vertical versus horizontal dyeing and drying installations 3866
viscose yarns. heat energy expenditure measured by thermogravimetric analysis 4918
water extraction from textiles before drying. mechanical means 6961
wool/nylon fiber dyeing, method, machinery, dyes, drying 430
yarns during sizing operations. methods, conduction, convection, radiation, dielectric 2557

DRYING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS SIZING MACHINERY, TENTERING MACHINERY)

Andar Unidryer. performance with dyed loose wool 8565
Brueckner's new tentering, drying, and setting machine with horizontal chain reversal 7656
causes of yellowing in yarn packages during RF drying 6952
Colordry Turbovac HTIT drying system for transfer printers 1261
commercial cotton gin drying systems. current research and potential for improvement 6438
continuous processes for knit fabrics 7561
Cool Dry System from Fastran Engineering 6954
cotton ginning. new and improved machines for drying, cleaning and ginning 6441
de-watering carpets, Kuesters variable slot suction tube 3670
directory. machinery for drying garments 6956
exhaust treatment system for dryers from Sueddeutscher Kuehlerfabrik Julius Behr 3934
Fastran Cool Dry system based on dielectric heating 6955
Fastran Cool Dry. drying cones of wool dyed in grease with accurate moisture regain, at low temperatures 2302
Fastran Cooldry. radio frequency drying for wet finishing sector 6812
Fleissner. manmade fiber production machinery 5743
Fleissner. perforated vacuum drum for paper and nonwovens 6158
Fleissner. thermobonding and binder bonding assembly 5954
futons. Fijitsu General drying unit 8833
heat recovery system for automatic tumbler dryers 8901
high frequency dryer with automatic transport system. THD-System from Thies 495
Honeycomb Systems' Trex Thru-Drying System for webs, features and configuration 5961
infrared predrying processes and Monfort's machinery 4502
infrared predrying, theory and practice 8563
ITMA [1987]. knitgoods 6093
mechanical finishing machinery at ITMA [1987]. consolidation and control instead of innovation 3673
Model S 1426 dryer from NEU 5206
modern flatwork finishing system, various types 4589
modifications to optimize performance. microprocessors 6957
Modular hank yarn drying range from Galvanin 5319
oven drying coatings on webs. increased hot air speed in dryer. Glenro 2796
Pegdry 800 series fabric dryer for tubular knits 8566
Pegdry conveyor air jet drying and relaxation finishing machine for tubular knit fabrics 5320
performance, production efficiency, and energy consumption evaluated for dyeing industry 8567
radio frequency drying equipment at Harold Ingram's new dyehouse 2797
radio frequency drying, benefits and prerequisites. various machines 5323
Remaflam process 1983
ringframe. spindle to spindle variables and yarn quality 6569
tenter dryers. cost analysis of new and old models 8568
textile drying mechanisms. cylinder drying machines. construction, design, capabilities, accessories 7657
THD high frequency drying system with automatic transport. Thies 5321
top arm wear and yarn quality 6570
tower drying systems for cotton. improved drying efficiency 6457
towerless seed cotton drying systems. new devices and arrangements. advantages 6458
Tre-Relax from Mohr. shrink dryer for tubular and open width knit fabrics 5322
Trex Thru-Dryer by Honeycomb Systems. for drying, curing, bonding of dry-laid permeable webs 7472
tumbler dryer from British Heat-Win Equipment and Warwick Dryers, steam vacuum drying 5400
tumbler, Tric-O-Dry. Vald Henriksen 431
two stage dryer for fibers, design, abilities 496
vacuum extraction. technical and economic benefits 8569
vertical versus horizontal dyeing and drying installations 3866
web drying innovations from Spooner 7658

DURABLE PRESS (SEE ALSO OTHER HEADINGS, SUCH AS CREASING AND PLEATING, PRESSING, SOIL RELEASE FINISHING)
acid hydrolysis of labile nitrogenous linkages. increased resistance 7639
agents. gas chromatography/mass spectrometry analysis 2793
aminofunctional silicones, diethylene glycol, and cocodiethanolamide improved finish cotton fabrics 473
approaches to durable press cotton fabrics with low formaldehyde release. use of scavengers, catalysts, catalyst systems 1965
chemical treatment of cotton for durable press finish 5304
condensation temperature and formaldehyde release in durable press cotton and polyester fabrics 8557
cotton fabrics crosslinked with DMDHEU. polyhydroxy alcohols as formaldehyde scavenger 474
cotton fabrics. additives and aminofunctional silicones 4486
cotton fabrics. ammonia mercerized cellulose for improved physical characteristics 7645
cotton textiles. durable press reactants based on cyclic ureas. solid probe mass spectrometric analyses 7640
crease recovery and durable press rating relationship to fabrics of different constructions 3521
crease resist crosslinking agents. durable press. chemical fundamentals of finishing agents 3657
dimethylol ethylene urea treatment of cotton fabrics. effect of curing conditions on crosslinking 8545
DMDHEU, polyacrylic acid, epichlorohydrin finish for cotton fabrics 8543
ethoxylated quaternaries are useful reactive additives for durable press finishing of cottons 6144
flame retardant cotton fabrics based on phosphonium precondensate and urea 479
foam application to cotton fabrics 6147
formaldehyde liberation during prolonged storage 6143
formaldehyde release markers in durable press reagents 2794
garment dyed cotton products. evaluating finishes. predyeing and post dyeing 475
garment dyed products. durable press finishing 1253
gas chromatographic/mass spectrometric analysis of agents 676
mixed catalyst system for durable press cotton fabrics 2784
Natural Phase products by Thomson Company. formaldehyde vapor phase treatment and removal 8544
online color measurement factors causing shade changes 681
reagents, formaldehyde release markers 690
resin finishing with improved performance and low formaldehyde release 1974
ring spun and polyester wrapped twistless yarn fabrics with durable press finish. compared 7392
Sequa Chemicals' Permafresh 9073 durable press finish for all-cotton fabrics 1964
simultaneous dyeing and easy-care finishing of cotton fabrics 1924
tetracarboxylic acids. cotton 7641
thermal adaptability. polymer coatings on fabrics. changes in cellulose after treatment 7642

DUST (SEE ALSO OTHER HEADINGS, SUCH AS AIR CONDITIONING, AIR POLLUTION, FILTER FABRICS, FILTERS, HEALTHCARE AND MEDICAL TEXTILES, INDUSTRIAL HEALTH AND SAFETY)
accumulation in the rotor. open end spinning of cotton results in yarn imperfections 3373
bacteria and endotoxin in cotton. statistical, biological analysis 8855
bacterial populations in lint from [1986] Texas cotton harvest 8857
biogas from willow dust. plant studies 3929
biogas plant for using willow dust and other textile waste. CTRL design 3930
biogas production from willow dust by dry anaerobic 3931
bracts, cotton. platelet binding in endothelia after exposure, role in byssinosis 8860
bracts. tannin content of bracts studied on three cotton varieties in the United States 6437
byssinosis research. United States cotton crop studies 8854
byssinosis. contribution of presence of mitogens and tannin 8862
byssinosis. in vitro model of constrictor effect on pulmonary muscle 8861
byssinosis. [1987] Endotoxin Inhalation Workshop 8864
comparison of flax and cotton dust toxicity 8864
cotton and wood. possible anti-cancer properties 8902
cotton bract extract. pulmonary responsiveness in exposed volunteers 8858
cotton bract extracts. mass spectrometry for bronchoconstriction agents 8859
cotton dust and endotoxins. TNF and interleukin-1 production in alveolar macrophages 8868
cotton dust and impurities. West German method to determine impurity of cotton 5451
cotton dust byssinosis symptoms and vitamin C effect 8869
cotton dust exposure. causes of chemotactic activity in pulmonary system 8871
cotton dust in mills investigated using computer model 4754
cotton dust toxicity. endotoxin content in mill observations 8875
cotton dust, byssinosis. surveys of Lancashire worker exposure and prevalence 8867
cotton dust, endotoxin and terpenoid extraction. correlation of sample with lab mast cell data 8876
cotton dust. effectiveness of ethanol, sodium hydroxide, hydrochloric acid endotoxin reduction treatments 8881
cotton dust. preparation of samples after solvent treatment for endotoxin reduction 8886
cotton endotoxins and tannins. role in etiology of byssinosis 8893
cotton endotoxins. correlation to inhalation-caused pulmonary edema 8892
cotton fiber dust studied for bacterial types 8852
cotton lint. reduction of endotoxins, amines, and tannins with solvent treatments 8888
cotton spinning and dust control. dust control oil with silica powder 4102
cotton, aerosolized. inhibition of lung cancer 8847
cotton, byssinosis. mass spectrometry examination of cellular lipid pool 8904
cotton, endotoxins. structural features, molecular biology 8916
cotton, tannin component. contribution to byssinosis development 8903
cotton, toxicity. emphysematous and fibrotic responses of lung tissue 8911
cotton. acute pulmonary functions at non-irritating levels 8872
cotton. animal inhalation models and pulmonary response 8883
cotton. computer simulation 7176
cotton. electron microscopy evaluations of subchronic pulmonary exposure 8879
cotton. endotoxin inhalation evaluation in animal lung tissue 8880
cotton. evaluation of quantitative chromogenic assay for analysis of endotoxins 8878
cotton. human lung response to toxin exposure and conditions of constriction 8874
cotton. isolated cell bound endotoxin relationships 8882
cotton. lab animals with high exposure, pulmonary interruption 8884
cotton. LPS toxicity samples unreliable in comparison 8910
cotton. measurements of environmental endotoxin and LPS 8885
cotton. physiological and cellular change evaluation of byssinosis 8870
cotton. pulmonary reaction studies on animal models 8905
cotton. reduction in workplace fly levels and corresponding drop in byssinosis among textile workers 8863
cotton. reference for comparison of LAL activity of endotoxin 8887
cotton. studies for biological potency and ultrastructural preparations 8873
cotton. studies of cholesterol, ionic calcium role in byssinosis 8889
cotton. testing of Limulus amebocyte lysate activity of endotoxin preparations 8890
deactivation of cotton dust toxicity. role of arachidonic acid treatment 8865

detoxification of cotton dust endotoxins using ethanolic compounds 8866
Downflow or D-Range dust control booth and filtration for safety in dye house 5548
dust control system, Sintamatic filtration system 5547
endotoxin in bacterial residue of cotton samples. correlation with gram-negative bacilli 8896
endotoxins in cotton lint. secondary pulmonary inflammation mechanisms 8891
Enterobacter in cotton dust. respiratory inhalation study with cellulosic dust 8853
Environmental Protection Agency. revised national ambient air quality standards. effects on ginning 7193
evaluation of bacterial populations from boll opening through harvesting 8897
exposure. animal model response evaluation 8877
extraction. ITMA [1987] show trends 1526
fabric dust filtration. applying computer model to design filters 2316
fabric filtration, mathematical model. performance prediction for baghouses 7520
filter cartridges in industrial dust removal. point-sealed nonwoven filters 1100
filter system, electrostatic 8909
filtering systems for dust and lint in plants 4753
filtering. polymeric materials modified by laser. computer simulation improves cotton fly dust separation 8906
filtration, needle-bonded polypropylene fibers. new gas and solid filtration apparatus 6030
floppy disk liner fabrics. effectiveness in wiping particles from media surfaces 7542
Impinjet scrubbers for dust collection, gas absorption, stripping of gases, gas cooling, vapor condensation 5549
Kaelin fan nozzle fabric cleaning system removes dust, lint, fiber fragments 2721
lint bacterial contamination. cotton plant acids and sugars 8899
lipopolysaccharide endotoxin from cotton lint. respiratory disorder study 8898
localized electrostatic precipitation versus exhaust ventilation for controlling dust in asbestos mill 8907
nonwoven fabric filters. processes controlling dust cake release 1104
tannins from cotton. effects on pulmonary cells 8900
toxicity of cotton dust. Bacillus and Enterobacter soluble toxins 8908

DYEING (SEE ALSO OTHER HEADINGS, SUCH AS COLOR, COLOR MATCHING, COLORFASTNESS, DYEING MACHINERY, DYEING PROCESSES, DYEING THEORY, DYES AND DYEING ASSISTANTS, FABRIC DEFECTS, FUGITIVE TINTING, LIGHTFASTNESS, PIGMENT DYEING AND PRINTING, PRINTING, SPECTRUM ANALYSIS, STRIPPING OF DYES, WASTE TREATMENT-- EFFLUENT)
acid dyes. dyeing of various silkworm varieties. differences in fine structure of amorphous region of silk fibers 1209
acidification treatment after sulfur dyeing, improved color, fastness 5210
acrylic fibers dyed with benzyl alcohol. solvent assisted dyeing 6858
acrylic fibers. uptake curves of cationic dyes. diffusion coefficients and time lag of dye uptake 6103
Ahiba's MPI laboratory technique to determine finishing, dyeing parameters 454
Alcosist AFA antifrosting agent. continuous dyeing or printing of nylon carpets with anionic dyes 7581
Auckland Dyeworks Limited, New Zealand garment dyeing services 2742
batik. best wax or wax blends for dyeing process 6859
batik. classical batik designs, apparel 1210
bobbin radial compactness distribution. calculation 6576
bobbins. Digicone coning system. Schweiter 6104
Book of Papers. American Association of Textile Chemists and Colorists. [1987] International Conference and Exhibition 402
Brook Dyeing profile. commission dyeing 3554
buyer's guide to dyes, pigments, chemicals, and machinery 8476
carbodiimides in a range of alcoholic solvents. fixation 3593
carpet yarns. problems with fourth and fifth generation polyamide fibers 403
carpets. continuous dyeing machinery from Kuesters 5189
carriers for dyestuffs in polyester dyeing. carrier mechanisms 5211
catalytic fading. casual effects among compound dyes 6860
cellulosic fabrics with grafted cationic groups compared. colorfastness, lightfastness 1211
chemical processing. present status and future developments 7558
CIM systems for dyehouses. anticipation of total process control 8798
Colimage computer aided coloring system from High-Tex-Systems 6100
color continuity. problems. causes connected to machinery and fabric 6861
color control problems. computerized color control 1202
colorfastness, measurement and evaluation of staining values 5201
commission, innovations at [1987] ITMA 6106
computer assisted technologies for coloring textiles. color measurement. more accurate 4424
computer systems to control and monitor production 4427
computerized color matching. implementation guidelines 8470
computerized control in dyeing and finishing. new systems, benefits 7553
computerized production control of dyehouse operations at Magyarovar knitting factory 1919
conference of AATCC. highlights. reactive coloration of cotton 379
conference, West German Dyer's [1988] 6830
continuous dyeing problems. dyes, processes, materials and machinery 3616
continuous measurement of edge/center/edge color differences on woven fabrics 407
control and supervising system for the dyehouse, Microcom. Vald. Henriksen 4428
cost reduction possibilities without compromising quality 7583
cotton Melana yarn dyeing on devices with perforated bobbins 1920
cross-staining of dyes during yarn wet processing. chemical setting 1177
Datacolor colorimetric system in Soviet wool institute. uses, deficiencies 5207
defects. German research 7566
definition of dyeing. trade names and description of dye types 8477
developments [1986-1987]. fastness testing. liquid dyes. blend dyeing 6862
diameter and density affects dye uniformity, fixation and sorption 4992
Digicone yarn package for dyeing from Schweiter Mettler 6639
dip dyeing. reduced water consumption 5212
direct, azoic dyed materials affected by DMDHEU resin, softeners, silicone emulsions, flame retardant, other finishing agents 1251
directory for United Kingdom companies 6811
Directory of UK Dyers and Finishers, Including Bleachers and Printers 8921
drum dyeing machine, Colorcombi from Proll & Lohmann 6117
drying machinery performance, efficiency, energy consumption evaluated 8567
dust control system, Sintamatic filtration system 5547
dye, additive economy in Hungarian industry 4429
dyeing, washing wastewater, cobalt level measurement 5555
dyestuffs industry. international overview. history. evolution. future changes 7584
Dyetex moves into garment dyeing. advantages, plant machinery, capacity 6101
electronic technology at ITMA [1987] 4723
energy consumption reduced in low bath ratio dyeing 5213
exhaust dyeing and commission dyeing. developments 5214
expert system, OPTIMIST. cheese and cone dyeing. BASF 5215
fabrics, industrial. developments 327
finishing wastewater. conversion device to reuse heat for dyeing

5272
foams, and foam stability at different blow ratios and concentrations of stabilizer, salt and alkali 456
garment dyeing and Quick Response, a necessary relationship according to Textile Apparel Linkage Council 3595
garment dyeing industry in United States, possible shake-out 3594
garment dyeing of knitwear. innovations at ITMA [1987]. handling automation 6847
garment dyeing procedures. patterns, trim, sewing, dyeing 6863
garment dyeing, increasingly popular concept for the domestic industry. Quick Response, shorter turnaround time 4430
garment dyeing. future prospects. Quick Response. cost savings 6864
garment dyeing. General Sportswear's new children's line, Chance. advantages, production 1212
garment dyeing. North Carolina State University conference highlights 406
garment. cost and quality comparisons of methods. [1990] forecasts 6105
German dyeing industry. prognosis for the future 3195
German Dyers' [1988] industry yearbook 2714
Graniteville's Gregg dyehouse. computer control and monitoring of processes 2743
guide to recent advances in textile wet processing 6817
heat setting. effect on textured polyester and dye uptake in carrier and HT dyeing 6865
Herforder Teppichfabrik's laboratory simulation of dye shading using the climate chamber system 2230
history, current status, and future trends of global dye industry 409
industry [April 1983-April 1986]. United Kingdom. status 3561
industry, agreement between Greenwood Mills and Permna Color Corporation, merger 3889
industry, history of research and development, current industry problems and prospects 1213
ITMA [1987]. preview. technical information 7898
Jasper material transport for yarn winding and dyeing without personnel 3578
Kensaikan's Scotdic color coding system. Hoechst's assistance program 6102
Kirstol Limited's dyeing process control equipment, from Allied Color Systems 5278
liquid heater for hot baths. role of steam 6080
liquor circulation regulated by Synchron Dyeing Control system from Thies. effects on goods properties 410
low wet pick-up. vacuum extraction. India. industrial applications 6818
membrane filtration used to produce desalted and concentrated fluid dye compositions for dyeing leather 5267
meterable dyes and computer programs for recipes 411
narrow fabric. machines at [1987] ITMA 2707
nonwovens. foaming technology applied to coloration 1168
package dyeing, conventional methods. developments in rapid dyeing 1223
package dyeing. problems of irregularity solved by the Digicone system 8478
packages. Digicone from Schweiter Mettler 3592
pad batch and continuous. preparation of woven and double knit cotton fabrics 384
pad-dry-cure, pad-dry-steam. dyeing techniques effect on resilience and strength abrasion retention of sheeting 1214
particulate migration. inducement and measurement 3038
plants used to dye yarn in Navajo rugs 1011
polycaproamide granules. effect of antistatic agent 412
polyester textured woven and knitted fabrics. processing sequence 6820
polyethylene terephthalate films. effects of organic solvent pretreatment on dyeing properties 453
polymeric antimigrants. statistical analysis of cost and performance 8468
preparatory processes. innovation in robotics and control networks at [1987] ITMA 6831
pretreatment range, computer controlled four-stage. Babcock 4410
Procion-resin method. reactive dyeing and resin finishing of fabrics 7582
quality control in dyeing operations of polyesters and its blends 413
quality control. color 5199
quality maintenance program for wet processing 1184
quality, automation in dyehouses elevate 6349
rapid dyeing systems for reproducible and faster dyeing of polyester 4431
raw cotton. dyeing and finishing simultaneously 1900
reactant fixable dyestuffs for better washfastness 8431
ready made goods. [1987] ITMA 6107
reduction overall costs. dyeing procedures, approaches to active savings 3596
relative contact level dyeing. factors, maximum levelness 6866
Remazol dyes in home usage 4426
repeatability, influential factors 7585
Roaches Engineering dyehouse computer-control units purchased by ICI 2740
Roaches flash ager unit for dyeing plant laboratories 5208
Schweiter Mettler's Digicone system. yarn packages 4131
scouring. influence on fabrics exhaust-dyed with dichlorotriazinyl dye and finished with DMDHEU 3597
screen steamer type ZZ-4/260-1, for filament yarn fabrics and dye fixation 5334
silk and nylon 66 blends 5219
socks and sweaters. new techniques for uniform coloration 3598
starch phosphates. properties and application 470
streakiness. causes from fabric, processes and machines 8479
stripping of dye from synthetic fabrics. BTRA process eliminates most problems 7586
study of advanced technology in dyeing 8503
sulfur and sulfur vat dyes. pad steam and jig methods 414
Swiss Society of Chemists and Colorists. history 4784
tailing phenomenon in cold pad-batch process. substantivity rather than lack of liquor circulation 6867
technical advances 7560
tenth SVCC symposium. biotechnology and dyestuffs 5216
textile chemical processing. water management 8446
Textile Dyer & Printer textile dictionary 8965
thermal activation of fabrics during dyeing. methods. influence on dyeing 1921
tubular knits. padding processes. tube break edge marking 6108
union dyeing and printing 5209
union fiber. dyeing and printing 1918
United States dye producers see better times ahead. profile of major companies, products, market position 6857
vacuum dyeing of yarn packages, mathematical model 5217
vacuum dyeing process from MTM Obermaier 6109
vat dyes. applications, factors in selection of dye type 1947
vat. thermofixation. effects on dyeability of mercerized and unmercerized cotton fabrics 6868
vat. thiocarbamide dioxide replaced with Rongalit S catalysts in single phase suspension 415
velvet fabric samples. results of azoic and cold brand reactive dyeing 6869
Vitexol D. defoamer from BASF 5196
water modification of dyeing behavior. ionic and non-ionic interactions in aqueous solutions 416
webs. shading defects obviated. air permeability, Perma-Tex measuring unit 417
West German industry analysis [1987]. poor performance 3976
West Germany, postwar textile developments. VTCC fortieth birthday 6419
wool. Sandolan MF range 5222
yarn package structure. precision winding for dyeing uniformity 5004
yarn packages. uniformity achieved with the new Digicone technology 8480
yarns. Digicone dye packages. advantages include levelness, color accuracy, fastness, quality, reproducibility 5007

DYEING--ACETATE FIBERS (SEE ALSO UNDER THE HEADING OF DYEING--TRIACETATE FIBERS)
azodisperse dyes. synthesis 6128
Polmatex-Dofama's BK5 jigger dyer, uses, tests, design 4432

DYEING--ACRYLIC FIBERS
AccuColor Orlon from Du Pont. producer dyed, dry spun polymer dyed acrylic 2469
active diffusion dyes with antistatic agents, increased diffusion, tests 4439
cationic dye sorption. Donnan approach 8481
cationic dye uptake. diffusion coefficients and time lag of dye uptake 6103
cationic dyes. ionic distribution coefficients. affinity 5218
cationic polystyrene latex in acid dye solutions. zeta-potential and surface dyeability 6870
Du Pont's AccuColor Orlon producer dyed fiber. state of the art coloring system, applications 1636
equilibrium sorption interactions. cationic dyes 418
molecular segmental mobility and effect on dyeing acrylic fibers 4434
overview 2744
polyacrylonitrile dyeability, suitability for blending 419
robotics and electronics in Amital's package dyeing plant 8828
solvent assisted dyeing. benzyl alcohol and disperse dyes 6858
Supacryl dry spun acrylic fiber from Indian Petrochemicals. dyeing of bulky yarn, preparation 4433
Supacryl dry spun fiber. dyeing factors and procedures 7587

DYEING--BAST FIBERS
Central Research Institute for Bast Fibers 5168
thin ramie fabric. causes of dyeing defects 2745

DYEING--BLENDS
behavior of Lenzing Modal viscose, alone and with cotton, in dyeing and finishing 3316
BTRA conference papers. dyeing of polyester, cotton, and their blends 3579
continuous dyeing. polyester/cellulosic blended fabrics. trends in technology dyeing 3600
continuous thermal fixation dyeing polyester/cotton fabric. color yield 1922
cotton, polyester and blends. recent coloration developments 3604
cotton/polyester knit fabrics, finishing and dyeing, lightfastness testing 309
cotton/wool blends. reducing damage to wool component during reactive dyeing 4435
flax/polyester fabric. DEAE treatment for improved dyeability 2704
flax/polyester. reactive dyes. thiocarbonate built-in catalyst 7588
mixed plasticizer systems for polyester and its blends 3609
monochlorotriazine dyes. polyester/cotton blends catalyst system 6871
no-additive, reactive, and cationic dyeing of polyester/viscose woven fabrics 420
polyester/cellulose blends. new printing reactive dye fixation in neutral pH conditions 3601
polyester/cellulosic fabrics. major factors affecting dyeing 2746
polyester/cellulosic. reverse dyeing sequence 8483
polyester/cotton. ICI experiments in one-bath exhaust method 8484
polyester/cotton. novel catalyst system 2747
polyester/cotton. results from not matching fiber components to primary shade 8482
problems. major dyeing factors. polyester/cotton fabrics 3602
reactive dyeing and printing on polyester/cellulose, polyester, cellulose fibers, methods 421
silk and nylon 66 blends 5219
silk/nylon 66 fabrics, dyeing behavior 6932
simultaneous curing/transfer printing of cotton and cotton/polyester fabrics using melamine formaldehyde 6929
single bath, single color active dyeing of silk and polyester (Lavsan) woven fabrics 422
Solfast rapid one bath method for exhaust dyeing of polyester/cellulosic blends 6862
stage operation. polyester/cotton fabrics. catalyst system 3599
vat dyed cotton/polyester knit fabrics, effects of shrinkproofing on dyefastness 6944
wool and cotton, using a bath of direct and acid and direct dyes 1923
wool and nylon yarns. angora mixed with angora. even dyeing difficulties 4436
wool/nylon dyeing guidelines 3603
wool/viscose fabric. one bath method for acid dyeing and resin finishing 1215
XRD reactive disperse. for polyester/cellulose blends in one step process 443

DYEING--CELLULOSE FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS DYEING--BAST FIBERS, DYEING--COTTON, DYEING--HIGH MODULUS FIBERS, DYEING--VISCOSE FIBERS)
color strength in chemically modified cellulose fibers 6873
cotton with grafted polymethacylic acid. results with copper basic dyes 7589
exhaustion dyeing of cellulose fiber knits. new interest in processes 8485
flame retardant cellulosic fabrics. new invention for dyeing these fabrics 7590
Indosol Navy SF-GLE from Sandoz. exhaust and continuous process dye 5259
Levametering process, dyeing cellulosic fibers with reactive dyestuffs 6872
lightfastness of anthraquinone dyes. oxidation index 7616
liquor ratio and exhaust ratio influence on dye pickup 7591
pad dyeing cotton and cotton blend knits. the new Tubocolor by Bruckner 8486
pore structure, fiber. thermodynamic affinity 4421
reactive dyes. diffusion and simultaneous reaction 6874
Sandene process for immature cotton and cellulosic fibers with reactive dyes. treatment, Sandoprint CS 6876
silk and polyester woven fabrics 422
technology developments. continuous dyeing trends 3600
various methods in dyehouse. results encountered 3619
vat dyes. developments, applications. cellulosic fibers and their blends 3636
wetting agent for dyeing cellulose. Sandozin EH Liquid 5299

DYEING--COTTON FIBERS
active dyes with T-index used with cotton fabrics 4463
azo dyes. photofading interaction with stilbene fluorescent brightening agent. effect of nickel salt treatment 2769
batik on cotton from Irmgard Feld. realistic nature depictions 4630
Bellini. high tech plant improvement for reliability, versatility and productivity 6875
blends of polyester/cotton. results from not matching fiber components to primary shade 8482
BTRA conference papers. dyeing of polyester, cotton, and their blends 3579
carbodiimides in a range of alcoholic solvents. fixation 3593
cationic grafts with crosslinking agents made fabric dyeable with anionic dyes 380
cationic. multiple colored effects on cotton 3571
chlorine. effect on colorfastness, dyed with reactive dyes 395
combined mercerization, dyeing method for woven cotton fabrics 4407
combined vat dyeing and mercerization saves electric energy, steam, water 5163
continuous dyeing of cotton with economical use of steam 3620
cotton warp, simultaneous sizing and pigment dyeing process, tests 4996
cotton, polyester and blends. recent coloration developments 3604
cotton/wool blends. reducing damage to wool component during reactive dyeing 4435
denim dyers go darker at Thomaston and Avondale Mills. high

twist and yarn dyed fabrics 5112
disperse dyes. optimizing molecular weight and concentration of polyethylene glycol 1216
durable press finishes, predyeing and post dyeing 475
dye setting fabrics dyed red 469
easy care cotton. garment dyeing potential 1957
exhaust pigment dyeing procedure for cotton garments 6877
exhaust pigment dyeing, new technique for garment dyeing cotton knit apparel developed by Cotton Incorporated 6121
faults, finishing. cotton fabric preparation. desizing 8235
fixation of reactive dyes, microwave, on cotton 6903
foam dyeing. measuring reflectance 1944
garment dyeing of cotton apparel, recommendations from Cotton Inc. preparations, procedures 6123
ginning and fiber properties. effect on dyeing imperfections in cotton fabric 7997
knitted. reduction of dyestuff consumption in Procion dyeing of cellulosic knitted materials 7627
Mak cotton knitting yarns, production, dyeing 170
Marvantex RBDS. buffered agent for bleaching and dyeing cotton hosiery 8487
maturity, red and green differential dyeing to determine spectrophotometric analysis 3218
online color measurement. importance of numerical information to detect color variations in dyed cotton fabrics 3849
organic pigment, polyvinyl chloride screen printing, cotton fabrics 5293
pad batch and continuous dyeing methods, preparation of woven and double knit fabrics 384
phosphonic acid reactive dyes for cotton 1946
pigment dyeing and shrinkproofing, combined method using TP dyes and liquid ammonia 423
printcloth. dyeability after crosslinking 3605
reactant fixable dyes. color and fastness properties 8488
Reactive Blue 109 and cotton printcloth. correlation of half-times of sorption and dyebath agitation 434
reactive dye fixation using microwave heating allows fixation temperature to be reached in five to ten seconds 4437
reactive dyed cotton fabrics. DMDHEU finishing 6878
reactive dyeing and chemical modification with acrylamide 6901
reactive, sulfur dyes. online color measurement factors causing shade changes 681
redox system and direct dyes 8513
Remazol dye fixation on unimpregnated and Naphtol AS-impregnated cotton. cold pad-dwell method 461
research laboratory operated by Cotton Incorporated 2204
Sandene process for immature cotton and cellulosic fibers with reactive dyes. treatment, Sandoprint CS 6876
simultaneous curing/transfer of melamine formaldehyde treated cotton and cotton/polyester blends 6929
simultaneous dyeing and easy-care finishing of cotton fabrics 1924
strength reduced in fibers. dye particles accumulated in rotors during spinning 144
sublimation transfer printing of cotton pretreated with crosslinking agents 3647
thermofixation's effects on mercerized and unmercerized fabrics 6868
uptake affected by ammonia and mercerization. cellulose crystallinity 4404
vacuum extraction. continuous dyeing with reactive dyes 424
vat dyed and subjected to ultraviolet radiation before treatment with surfactants and washing 5220
woven fabric dyeing with vat dyes 425

DYEING--FLAX FIBERS

DYEING--GLASS FIBERS

DYEING--HAIR FIBERS
angora mixed with wool and nylon yarns 4436
mohair and kemp. uptake of Neolan Blue 2G measured by X-ray microanalysis 7592

DYEING--HIGH MODULUS FIBERS

DYEING--INORGANIC FIBERS (SEE ALSO HEADINGS, SUCH AS DYEING--GLASS FIBERS)

DYEING--JUTE, SEE DYEING--BAST FIBERS.

DYEING--MANMADE FIBERS
amino and thioether derivatives of dihydroxy anthraquinones 3622
diffusion coefficient of dye in polymer substrate 6924
diffusion of dye depends on polymeric structure of the fiber 1925
disperse and cationic dyes, developments 6110
polyamide fibers. dyeing behavior influenced by amino groups, comonomer groups. chemical analysis 4438
polyester sewing thread, dyeing properties 3307
ultraviolet stabilizer moiety incorporated into commercial dyes used for synthetic fibers 7624
Vitexol D. defoamer from BASF 5196

DYEING--MODACRYLIC FIBERS

DYEING--NYLON FIBERS
acid dyes for nylon used with anionic surfactants 5265
acid dyes in nylon films. photodegradation 2768
acid dyes, modified. perchloroethane 5253
active diffusion dyes with antistatic agents, increased diffusion, tests 4439
affinity testing with Toray FYL-500 tester 8696
Amsoline F surfactant, uniform dyeing of wool, nylon fabrics 5228
arylaminoazo dye synthesis. diarylamine derivatives applied 1942
carboxylated and phosphonated reactive dyes. fixation 426
Ciba-Geigy's Cibatex 4458 photodegradation inhibitor for polyamide carpet fibers 3606
cross-sectional shape. effect on lightfastness and light reflectance properties of dyed nylon 6 yarns 4058
equilibrium using monoazo disperse dyes 3629
Gryfalan metallic dyes from Organika (Poland). wool and nylon dyeing, tests 4459
methyl orange acid dye. binding with nylon. hydrophobic interaction 427
monoazo dyes. synthesis and fastness properties 6911
nylon 6. role of redox system 7593
Nylosan Blue C-BGL and Nylosan Blue E-BGL acid dyes from Sandoz for polyamide fibers 5261
polyamide-containing goods. dyeing parameters 8489
Ruco Leveler HUD from Rudolf. anionic leveling agent for dyeing polyamides 5193
solution-dyed nylon yarns for contract carpet market. Golco Industries' Deltron-S 4971
synthesis of arylamino azo dyes by Chapman reaction. applications on polyester and nylon 3633
Tectilon Yellow 3R dyes carpets made of polyamide 5264
Zh orange acidic polyamide dye on nylon fabric using ammonium sulfate 4461

DYEING--NYTRIL FIBERS

DYEING--OLEFIN FIBERS
disperse dyes and methacrylic acid grafted polypropylene fibers 3628
mass-dyeing fine titers. Sanylene F pigments from Sandoz 8490
polypropylene, pigmented 6879
Sanylene F polymer melt soluble dyestuffs 6111
spin dyeing polypropylene. operational process, influential factors 5221
spin-dyeing of polyester and polypropylene using polymer-soluble dyestuff. advantages. process engineering criteria 7596

DYEING--POLYESTER FIBERS
affinity testing with Toray FYL-500 tester 8696
alcohol, dyeing properties of polyester fiber 6880
applications of arylamino azo dyes on polyester 3633

arylaminoazo dye synthesis. diarylamine derivatives applied 1942
barriness. uneven dyeing of polyester fabrics. causes. migration behavior of disperse dyes 7594
blends of polyester/cotton. results from not matching fiber components to primary shade 8482
BTRA conference papers. dyeing of polyester, cotton, and their blends 3579
carrier dyeing 2748 2749
carriers for dyestuffs in polyester dyeing. carrier mechanisms 5211
carriers. effect on dyeability of PET 1651
cationic dyeable and carrier free dyeable fibers 7595
chromatic dye reduction during polyester dyeing, method 428
color dyeing before extrusion 7346
computer simulation disperse dye application to polyester fibers 459
cotton, polyester and blends. recent coloration developments 3604
defects. compensating for nonuniform dyeing results 8491
disperse dye bath preparation. developments. testing and results 6112
dyeability improved by modifying molecular structure or fine structure of fiber 6113
effects of optical brighteners on polyester dispersion. dyed yarn after sun exposure 5183
fabrics, polyester and polyester blend. high temperature dyeing with swelling agents 8492
high temperature high pressure dyeing. role of polyethylene glycol-fatty acid condensation products 4440
low temperature plasma treated polyester fabric, dyeing and deep shade properties 4468
mixed plasticizer systems for polyester and its blends 3609
Palanil Navy Blue RN. disperse dye from BASF for polyester and polyester and cellulose blend piece goods 5262
polyester modified with ethylene polyglycol, metallic dyeing, improvements 4441
rapid dyeing systems for reproducible and faster dyeing of polyester 4431
Sandoz Foron AS dye for polyester. lightfastness in automotive fabric applications 6906
Sandoz Foron RD dyes for maximum exhaustion dyeing effect with polyester 4460
Sanyo chemical agents to improve dyeability 5197
spin-dyeing of polyester and polypropylene using polymer-soluble dyestuff. advantages. process engineering criteria 7596
styryl and azo dyes for polyester fibers. derivatives 7620
swelling treated, dye uptake penetrability 27
technology developments. continuous dyeing trends 3600
textured yarns. energy saving dyeing system 1926
thermomigration of disperse dyes 6881
thiophene derivatives used as optical brighteners and disperse dyes on polyester 7554
uptake testing, textured yarns. Toray FYL-500 continuous affinity tester 8700

DYEING--SILK FIBERS
acid dyes, single and binary mixtures. time adsorption isotherms determined 1927
acid dyes. dyeing of various silkworm varieties. differences in fine structure of amorphous region of silk fibers 1209
aqueous extract from raw leaves of Ilex pedunculoso miquel for silk fabrics 1959
batik on silk cloth. Joachim Blank's art 4629
China. production technology reforms and breakthroughs 4989
color matching with personal computers in silk print dyeing 2736
comparative study of dyeing behavior in silk samples from China, Brazil and South Korea 7800
degumming reagents, influence on rate of dyeing with acid dye on silk 1958
elongated silk fibers with acid dyes. dyeing properties 8493
gypsum. soluble retardant 6882
Lithospermum root dye extracted and studied. high colorfastness 6114
metal complex dyes and the photodegradation of silk. effect of metal concentration 7597
overview. compared to wool 6468
preparation, dyeing and printing of silk. review of technology and materials 3607
tanned silk. black dyeing using metallic salts as mordants 8494

DYEING--SPANDEX FIBERS

DYEING--TRIACETATE FIBERS

DYEING--VINAL FIBERS

DYEING--VINYON FIBERS
computers and software. electronic data information systems, maintenance, dyeing 4515

DYEING--VISCOSE FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS DYEING--CELLULOSE FIBERS, DYEING--HIGH MODULUS FIBERS)
adsorption of Congo Red 4442
behavior of Lenzing Modal viscose, alone and with cotton, in dyeing and finishing 3316

DYEING--WOOL FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS DYEING--HAIR FIBERS)
Amsoline F surfactant, uniform dyeing of wool, nylon fabrics 5228
azo acid dyes derived from 3,3'-dinitrodiphenyl sulfone 3625
azo dyes. photofading interaction with stilbene fluorescent brightening agent. effect of nickel salt treatment 2769
blends. new trends and developments at ITMA [1987]. need for versatility 6922
Ciba-Geigy introduces Neolan Plus for dyeing wool piece goods 6894
colorfast, machine washable wool using new polyquaternary amino compound 6853
combed sliver dyeing, treatment with thiocarbamide, increased chromatic absorption 4444
cotton/wool blends. reducing damage to wool component during reactive dyeing 4435
cross staining during yarn scouring. methods to minimize 2751
developments in dyeing techniques, quality improvements, use of fiber blends 1929
developments in wool dyeing and finishing. use of continuous shrink resist treated wool 6116
dye selection. technical and economic criteria 2752
electromagnetic treatment of dye bath intensified dyeing with acid dyes 5224
ethoxylated amphoteric compounds and acid dyes. wool fibers 6902
European and South American wools. amino acid content and variations in dyeing worsted yarns 6479
expert system, Wooly from Sandoz. dye process optimization 5225
extended wool fiber. initial rate of dyeing and fiber surface wettability 2753
foam application of acid dyes. effects on dyeing properties 8495
Gryfalan metallic dyes from Organika (Poland). wool and nylon dyeing, tests 4459
high density compression of wool tops improves productivity 4445
Kroy, Canadian continuous chlorination process for treating wool tops, effect on dyeing. IWS study 6559
Lanaset dyed woolen and worsted yarn. effects on spinning performance 1928
machine-washable wool. selecting dyes 7598
machinery presented at [1987] ITMA 8496
machinery, dyes, chemicals for wool piece dyeing 5226
Merino, Chokla, Rambouillet crossed with Chokla yarns dyed under different pH conditions. effects on stress-strain properties 975
Neutrichrome S dyes. fixing by radio frequency. optimal conditions 6883
Optilan dye system from Sandoz 6895
phosphonated and carboxylated reactive dyes. fixation 1930

piece dyeing. problems with color uniformity. analysis of causes 8471
process to preserve bulk of wool yarns during package dyeing developed at CSIRO 4446
pump speed and flow pressures during loose-wool dyeing. Soft Flo unit 6887
reactive dyes. slow fixation at low temperature. causes 429
reactivity and affinity of wools versus natural variations in properties 8497
redox systems using direct dyes 3608
reflectance and photostability to sunlight. influence of pH 1950
Sandolan MF dyes for wool 2750
Sandolan MF range from Sandoz. characteristics, results 6115
Sandolan MF range. new dyes for wool 5223
Sandolan MF wool dyes 5222
Sandolan MF. dye range for wool 1941
sulfide sliping process. effect of fiber diameter and wet processing 8005
surfactant scouring process from CSIRO allows lower temperatures 8498
vacuum compaction before low temperature dyeing, increased sorption 5227
Verolan WNT. promotes application, shading, and leveling of various dyes on wool 5195
wool fabrics. machine washable printing 2775
wool tops. dyeing with reactive dyes. bundle tenacity reduced by twenty percent 1217
wool. solvent pretreatment. effect on shrinkproofing and dye uptake 2709
wool/nylon fiber dyeing, method, machinery, dyes, drying 430
worsted tops. dyeing according to IWS tests 2754
woven wool fabrics, KTs-2 optical color measurement tester 1218
WRONZ study of cross staining. problems when dyeing knops 4443

DYEING ASSISTANTS

Amsoline F surfactant, uniform dyeing of wool, nylon fabrics 5228
azo dyes and dye intermediates. design of non-mutagenic dyes 7906
British dyers and finishers directory (Book) 8921
carrier dyeing polyester fibers 2749
cationic. multiple colored effects on cotton 3571
Ciba-Geigy's Cibatex 4458 photodegradation inhibitor for polyamide carpet fibers 3606
concentration tests for prevention of oxidative staining during jigger dyeing 8512
evaluation of chemicals and auxiliaries for dyestuff classes 6910
fixatives, effect on direct dyes for cotton fabrics 5229
metallic salts as mordants. black dyeing of tanned silk 8494
mixed plasticizer systems for polyester and its blends 3609
nonionogenic surfactants and influence of dyes on turbidity 3630
novel catalyst system for polyester/cotton blends 2747
polyester fabric dyeing. barriness, striping. causes. migration behavior of disperse dyes 7594
polyester/cotton fabrics. new catalyst system allows single stage operation 3599
polymeric antimigrants. statistical analysis of cost and performance 8468
quaternary ammonium compounds in wet processing 7552
reactive dyes, printing with synthetic thickeners 5288
reserving agents for evenly dyed angora and wool and nylon yarns 4436
soaping agent for printing 5230
sodium dilithionate as decolorizing agent in dye process wastewater 7179
sodium silicate for fixation of reaction dyes by exhaustion 3631
trade names of textile finishing products from Chemox Industrial, C. D. Corporation 4792
wool piece dyeing. chemicals and machinery 5226

DYEING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS FINISHING MACHINERY, PRINTING MACHINERY, YARN PACKAGES)

ADC 100 automatic/progressive alkali metering system for reactive dyeing 8499
addition, impregnation, liquor pickup. Flexnip from Kuesters 4450
Ahiba Colormat laboratory dyeing apparatus for research and development integrated color network 2755
Airflow HT 180 and Remazol automat 437
applicator. Kuesters Flexnip 3613
AquaFlow rope piece dyeing machine from Gaston County 7599
artificial intelligence type computer color matching system from Kanebo, automatic color correction in lots 5204
ATME-I [1988] in Greenville 5536
automation of continuous dyeing unit at Saic-Velcorex plant 6347
automation of dyehouses. advances toward ease of insertion 6348
automation. advantages of its uses in dyehouses 6349
autonation of dyeing SEDO. new products 1932
Avondale's twelve ball indigo dye range with steamer for pure sulfur shades 1931
batch dyeing. for yarns on cones and fabrics on beams. advantages 1933
beam dyeing machines. market survey 7603
British textile manufacturers invest in dyeing equipment for quicker reaction times to trends 5231
buyer's guide for wet processing controls from American Dyestuff Reporter 1219
carpets. continuous dyeing machinery from Kuesters 5189
circular knitted fabrics with tubular construction 2712
Colorcombi from Proll and Lohmann. combines drum, packing, and paddle dyeing processes 3610
colored effects on yarn in hank and packages. SWA Italia SMT 2002 and the Spraychromatic 081 machines 6891
Colorex microprocessor exhaust dyeing control system from Schermuly-Elektronik 6884
computer aided Colimage coloring system from High-Tex-Systems 6100
computer and microprocessor advances in dyeing and finishing machinery 6855
computer controlled dye liquor applicator for carpets from Fleissner 4389
computer controlled dyeing from Applied Colour Systems 7604
computerized process control developments for the dyehouse 2741
computerized systems from Dosacolor 3125
computerized Texunion DMC 5504
conference, West German Dyer's [1988] 6830
continuous dyeing problems. dyes, processes, materials and machinery 3616
continuous dyeing range, Tric-O-Steam from Vald Henriksen 431
continuous processes for knit fabrics 7561
continuous rope washing Model LC Two Flow machine from Brazzoli 5237
continuous. Forbo and Fleissner range for dyeing and backing tufted carpets 8467
cotton fiber and yarn bleaching and dyeing machinery from Polmatex-Cenaro and Dofama 4391
denim dyeing equipment. Thomaston Mills' 5112
directory of international manufacturers 5164
drum dyeing Colorcombi machine from Proll & Lohmann 6117
drym dyeing Proll and Lohmann Colorcombi axis-feed system 6886
dye bath exhaustion control. machinery from ITF-Nord 6118
dye house. Downflow or D-Range dust control booth and filtration for safety 5548
Ecobox horizontal dyeing machine from Barriquand 6885
exhaust dyeing and commission dyeing. developments 5214
exhaust dyeing. Then Airflow and Remazol Automat 5249
exhaustion dyeing of cellulose knits. new jet and overflow equipment 8485
exhibits ITMA [1987]. dyeing and finishing machinery 1238
expert system, OPTIMIST. cheese and cone dyeing. BASF 5215
expert system, Wooly from Sandoz. dye process optimization 5225
finishing machinery at Klopman's plants in Frosinone 5538

flash ager, pilot scale from Roaches. padder and steamer 2760
flaws causing uneven color due to uneven temperatures in dye bath 6861
Fleissner. take-up unit and Colormat dye kitchen 5276
Flexnip from Kuesters. low capacity liquor application mechanism 5233
Fluidyer carpet dyeing system. Kusters 7600
foam dyeing machine for small dye lots 6119
French robotizing bobbin handling operations for faster dyeing methods 5234
G-Mex Textile and Technology exhibition. chemicals, equipment. dyeing, printing, finishing 4743
garment and paddle dyeing machines. directory 7605
garment dyeing, buyer's guide [1987-1988] to machinery 1221
garment dyeing. Cotton Incorporated recommendations on dyeing machinery for cotton apparel 6123
garment dyeing. Dyetex. advantages, plant machinery, capacity 6101
Harold Ingram's new dyehouse, machinery, control equipment 2756
high temperature Labomat laboratory dyeing unit with infrared heating 7601
hosiery dyeing machines, microprocessor controlled, features of various systems 5241
hosiery. Proll Loman Colormat-800 versus Tis TFK-100 dyeing machines with pressure rollers 5238
improvements. robotization 1948
India. implementation of recent developments 7564
ink jet dyeing systems for the carpet industry. Milliken, Burlington, Stork Brabant, Johannes Zimmer machinery 5242
innovations in package dyeing, products 6893
International Hosiery Exhibition. Radial Flow Static Dyeing System from Gaston County for ultra-sheer pantyhose 3614
Italian machinery developments. weaving, spinning, dyeing 4740
ITMA 1987. review. developments displayed 1220
ITMA [1987] dyeing and finishing machinery reviewed 1901
ITMA [1987] highlights in wet processing. advanced technology, developments 4393
ITMA [1987] highlights. rope dyeing and tubular fabrics. continuous and batch 3612
ITMA [1987] wet processing machinery 1176
ITMA [1987], dyeing, printing and finishing machinery innovations 3637
ITMA [1987]. automation and optimum reproducibility in finishing and dyeing equipment 2711
ITMA [1987]. automation. dyeing knitted fabrics 3562
ITMA [1987]. batch dyeing and finishing equipment emission control 4398
ITMA [1987]. carpet dyeing trends 6096
ITMA [1987]. continuous dyeing machinery 4447
ITMA [1987]. continuous 6892
ITMA [1987]. developments in dyeing machinery 381
ITMA [1987]. exhaust method piece dyeing 8506
ITMA [1987]. finishing equipment and accessories exhibited 7557
ITMA [1987]. German manufacturers' success in integrating process control 3556
ITMA [1987]. highlights. dyeing and dispensing systems 3659
ITMA [1987]. importance of automation, computer control 3611
ITMA [1987]. innovations and improvement. trend to smaller lots. CAD systems 6920
ITMA [1987]. innovations in wet processing machinery. application of process control 6821
ITMA [1987]. knitgoods finishing machinery 6093
ITMA [1987]. machines for pretreatment and dyeing. quality improvement and automation 6921
ITMA [1987]. MTM-Obermaier exhibits for knitgoods 5180
ITMA [1987]. pretreatment systems 4409
ITMA [1987]. process optimization in finishing equipment computerization 4399
ITMA [1987]. ready made goods 6107
ITMA [1987]. trend toward automation for increased productivity and decreased cost 7129
ITMA [1987]. trends and developments in dyeing fabric. need for reliable, versatile machinery 6922
ITMA [1987]. trends and highlights 5214
ITMA [1987]. tubular knitgoods dyeing and drying machinery 6130
ITMA [1987]. wet processing developments. computerized process control 7565
ITMA [1987]. wet processing machinery 1237
ITMA [1987]. yarn dyeing and drying machinery 8501
ITMA. exhaust, jet, and continuous dyeing machinery 2757
ITME [1987]. carpet manufacture trends 6249
jet dyeing machine by Devrekha Engineers. heat energy savings 432
jet dyeing seminar at Clemson University 8475
jet dyeing Then-Uniflow machine with Then-Datacomp control computer 5239
jet dyeing Vald. Hendriksen VH-Jet 80 machine. test runs with cotton, manmade, knit and woven fabrics 6889
jet dyeing, aerodynamic system. Lindenfarb's Airflow 540 4452
jet dyeing. Futura 3000, largest machine for carpet industry designed by Gaston County. Quick Response dyeing 5235
jet technique. Vald. Hendriksen's Jet-80 dyer 7606
jet. VH Jet 80 range of dyeing machines from Vald. Hendriksen 5243
jet 8511
jig dyeing. winch design for simultaneous emptying of more than one jigger during debatching 8837
jiggers. Conticon automated system by Kuesters 8444
jigs 5244
kitchen. Van Wyk fully automated color kitchen at Walsden Printing 2759
L. J. Specialties distributes Japanese dyes and equipment 3555
laboratory Model 350/6 Microcolor from Pretema. dyeing machine with computer control 7602
laboratory. Colorstar from Zeltex. with computerized process control 5232
Laura Ashley's Helmond plant, new equipment from Stork Brabant 6137
liquor ratio. variable. Ecobox horizontal dyeing machine developed by Barriquand 8500
measuring instruments, function in dyeing and finishing 6822
metering system of pH value using Joseph Jasper's Simpledos 4448
modernization. control of processes and automated dispensing systems 5476
package and hanks, yarn. machinery and processes 8539
pad-batch systems. edge spreading machinery optimized to reduce faults 433
pad. Bicoflex from Ramisch Kleinewefers 3615
pad. Bicoflex from Ramisch-Kleinewefers 5245
pad. Bioflex from Ramisch-Kleinewefers 8502
padder. Model 222.11 from Kuesters with automatic fast cleaning 5236
piece goods, knit. improvements 4387
pressure dyeing Unicon system, Rapidflow horizontal pressure dyeing system, Econoflow fabric dyeing machine 6888
programmable microcomputer 5205
pump. Soft Flo controls speed and reduces flow pressures during loose-wool dyeing 6887
pumps. circulating. instrument designed to test performance 6890
radio frequency for loose stock, yarn, and sliver. from Smith Engineering 7604
reactive and dispersion dyeing. rotor moistening 4454
reactive and dispersion dyeing. WEKO rotor moistening process 4455
relative contact level dyeing. factors. maximum levelness 6866
rollers and roller coatings for the textile industry 4752
Serracant's tow dyeing, steaming, and milling/scouring units 6094
Shock Steam from ASISA, process and equipment features 6896
Spanish machinery review. crochet, trimmings, raising, dyeing, printing, medical textiles 1536
spectrophotometry. advances in controlling and analyzing the color of any end product 1949

staple yarn dyeing, intensified mass transfer, by magnetizing water 5246
static dyeing machinery by Cubotex and Gaston County for hosiery 2761
steam injection. noise control measures to comply with EEC directive 5552
streakiness. causes from fabric, processes and machines 8479
study of advanced technology in dyeing processes 8503
Swiss textile machinery developments. high praise from experts 5537
technical factors affecting dyeing properties 8504
Thies' new developments. Synchron Dyeing Control, Multi-Product Injection, Combined Cooling-Rinsing system 2758
Ventura Rapide manufactured by Longclose. rapid fabric dyeing machine with low liquor ratio 5240
vertical versus horizontal dyeing and drying installations 3866
wet processing, products review 1178
wool dyeing and finishing. dyestuff selection, dyeing machinery 6116
wool piece dyeing. chemicals and machinery 5226
wool/nylon fiber dyeing, method, machinery, dyes, drying 430
Wrap Spun Yarns. plant equipment 5769
WRONZ Soft Flo microprocessor system. to overcome effects of dyeing at high liquor flow pressure 5203
yarn coloring system Spraychromatic 081 from IWS 2762
[1987] ITMA. systems for wool printing 8496

DYEING PROCESSES (SEE ALSO OTHER HEADINGS, SUCH AS PRINTING, SCREEN PRINTING)
AccuColor yarn from Du Pont. polymer dyed, dry spun for better wickability and washfastness 862
acid dyeing silk with sodium n-alkylsulfates 3652
adding dye at intervals in cycle. dye absorption model 8505
addition, impregnation, liquor pickup. Flexnip from Kuesters 4450
azo dyes. binding equilibria described by ion-exchange 6898
batik on cotton from Irmgard Feld. realistic nature depictions 4630
batik. West German artist Ellen Goldman 4778
Bayer Levafix dye series in cold pad-batch process 3621
Bayer Levafix E, EA, and EN. structure, properties, reactivity, and affinity 4458
beam dyeing machines. market survey 7603
bobbins and skeins. automatic management. cost reduction 6899
BTRA conference papers. dyeing of polyester, cotton, and their blends 3579
C. I. Reactive Blue 109 and cotton printcloth. correlation of half-times of sorption and dyebath agitation 434
calibration dyeing. color matching 8469
carrier dyeing polyester fibers 2748 2749
cationic dyeable and carrier free dyeable fibers 7595
cellulose fibers. variables encountered in different processes 3619
Ciba-Geigy introduces Neolan Plus for dyeing wool piece goods 6894
cold pad-batch dyeing and Levafix dyestuffs 4451
Color Magic color changing process for apparel, Greater Texas Finishing 5247
color matching. Applied Color Systems' software programs for exhaust and continuous dyeing and printing 3591
Colorex microprocessor exhaust dyeing control system from Schermuly-Elektronik 6884
computer control. planning and implementing 722
computer integrated manufacturing in the dyehouse. system for Gaston County Dyeing Machine 1935
computerized cold pad-batch dye liquor formulation 6900
conference, West German Dyer's [1988] 6830
continuous dyeing of cotton with economical use of steam 3620
continuous dyeing systems. Superba. modified heat setting apparatus 497
continuous dyeing systems.Superba heat setting developed for dye rate 6159
continuous dyeing, methods, influence on reactive dyes 1222
continuous dyeing. optimizing efficiency of short batches 5248
continuous, polyester/cellulosic fiber. listing and tailing, thermosol methods 435
continuous. automation 6832
defects compensating for nonuniform results with polyester fabric 8491
disperse dyeing. mathematical expression of rate constants in empirical rate of dyeing equations 2765
dispersed dye systems. performance of lignosulfonate dispersant depends on bonded cation 436
dyehouse effluent heat recovery. problems with heat recovery systems 3946
Ecobox horizontal dyeing machine with variable liquor ratio developed by Barriquand 8500
effect of dyestuff properties on dyeing methods 7614
electromagnetic treatment of dye bath intensified dyeing with acid dyes 5224
ethoxylated amphoteric compounds and acid dyes. wool fibers 6902
exhaust dyehouse activities analyzed with computer to increase profit 8813
exhaust dyeing. renewed interest, new developments 5249
exhaust method piece dyeing. ITMA [1987] 8506
exhaust pigment dyeing procedure for cotton garments 6877
exhaust pigment dyeing, new technique for garment dyeing cotton knit apparel developed by Cotton Incorporated 6121
exhaust, one-bath. ICI experiments for polyester/cotton blends 8484
exhaust. reducing costs, energy and water consumption, improving worker safety 437
exhaustion dyeing of cellulose fiber knits. new interest in processes 8485
exhaustion with reactive dyes, influence of meter pumps. 55th ACIT at Rouen 6099
fixation of reactive dyes with foamed silicate systems 3631
fixation yields. impact of vacuum extraction on continuous dyeing of cotton with reactive dyes 424
foam application of acid dyes. effects on dyeing properties 8495
foam dyeing Levafix Blue E-RA and Levafix Brilliant Red E-4BA 1944
foam dyeing machine for small dye lots 6119
foaming. concentration profiles of acid dyes in nylon 6 films 8521
garment dyeing and other fabric finishing methods 6124
garment dyeing of cotton apparel, recommendations from Cotton Inc. preparations, procedures 6123
garment dyeing procedures. patterns, trim, sewing, dyeing 6863
garment dyeing with pigment colors. technology to dye anything anywhere. rotary washing used, dyeing process 5250
garment dyeing with pigments. cotton garments, popular weathered or distressed look 1936
garment dyeing woven cotton sportswear. splatter dyeing 1196
garment dyeing, improving preparation techniques 1195
garment dyeing. Ciba-Geigy. fiber reactive dyes and systems 7607
garment dyeing. filtering and removing stone residue from wastewater 8509
garment dyeing. future prospects. Quick Response. cost savings 6864
garment dyeing. importance of quality control. testing for shrinkage and proper dyes 8508
garment dyeing. methods, difference, manufacturing garment dyed apparel 6122
garment dyeing. NCSU conference report 1206
garment dyeing 7608
garment, domestic apparel industry and retail ordering. other influential factors 5251
garment. overview 8507
gas fired liquid heating systems in dyeing operations. benefits of use 5528
German Dyers' [1988] industry yearbook 2714
gypsum as soluble retardant in dyeing silk 6882
infrared radiation through gas combustion in drying and heat setting 8510
innovations in machinery. use of microprocessors 4425
ITMA [1987]. interest in novelty production 5962

ITMA [1987]. trends and developments in dyeing fabrics. need for skilled engineers 6922
jet dyeing seminar at Clemson University 8475
jet dyeing, aerodynamic system. Lindenfarb's Airflow 540 4452
jet. machines and technology. emphasis on rope processing 8511
jigger dyeing. chemical concentration tests to prevent oxidation stains 8512
laboratory dyeing. Model 350/6 Microcolor machine from Pretema 7602
laboratory Labomat high temperature dyeing unit with infrared heating 7601
laboratory machinery and processes from Ahiba 6125
Levametering process, dyeing cellulosic fibers with reactive dyestuffs 6872
lignosulfonate dispersants. effect of cation type 4453
liquor ratio and exhaust ratio influence on dye pickup 7591
liquor ratio reduced Sancowad process with foam 3618
machinery and technical factors affecting dyeing properties 8504
machinery from Proll and Lohmann. Colorcombi. combines drum packing, and paddle processes 3610
manmade fibers, developments 6110
mass transfer intensified by magnetizing water in the vacuum unit 5246
microwave dyeing process. MicroDye from Dylon 3617
microwave fixation of reactive dyes on cotton 6903
microwave oven. Dylon 4449
monoazo disperse dyes. dyeing equilibrium using nylon 3629
Optilan dye system from Sandoz 6895
package and hanks, yarn. machinery and processes 8539
package dyeing, conventional methods. developments in rapid dyeing 1223
package dyeing, yarn. Digicone. Schweiter 6126
packages. Digicone from Schweiter Mettler 3592
pad batch processing. research to determine optimum takeup speeds 6904
pad. tubular knitgoods 5252
padding tubular knit fabrics. optimal friction data from experiments 7628
padding, knit fabrics. process variables and results 7609
perchloroethane dyeing of nylon films with modified acid dyes 5253
phosphate substitutes in the dyehouse 2763
polyester/cellulosic blended fabrics. trends in technology. continuous dyeing 3600
polyester/cellulosic fabrics. major factors affecting dyeing 2746
polyester/cotton blends, novel catalyst system using monochlorotriazine dyes 6871
polyester/cotton fabric. color yield in continuous thermal fixation dyeing 1922
polyester/cotton fabrics. new catalyst system allows single stage operation 3599
polyester/cotton fabrics. problems. major dyeing factors 3602
print dyeing. making cotton fabrics cationic. methods 2764
process control, raw materials parameters for first quality fabric 2265
Procion-resin method. reactive dyeing and resin finishing of fabrics 7582
Proll and Lohmann Colorcombi axis-feed drum dyeing system 6886
reactive and dispersion dyeing. rotor moistening 4454
reactive and dispersion dyeing. WEKO rotor moistening process 4455
reactive dyeing and chemical modification with acrylamide. cotton fabric 6901
reactive dyeing of cotton/wool blends. degradation of wool component 4435
reactive dyes and cellulose. diffusion and simultaneous reaction 6874
redox dyeing system. nylon 6 fibers 7593
redox system used with direct dyes on cotton and mercerized cotton 8513
redox systems using direct dyes 3608
reduction overall costs. dyeing procedures, approaches to active savings 3596
Remazol dyes in home usage 4426
Remazol dyes. tested for dischargeability 1940
resist dyers of contemporary and traditional apparel and textiles. Shigeki and Shihoko Fukumoto 1402
reverse dyeing sequence. polyester/cellulosic blends 8483
rope piece dyeing AquaFlow machine from Gaston County 7599
Royal Purple, reconstruction of ancient dye preparation process 5263
Sandolan MF dyes. applications in automated systems 442
Sandoz Foron RD dyes for maximum exhaustion dyeing effect with polyester 4460
Sandozin EH Liquid. wetting agent for dyeing cellulose 5299
SGS Quality Control claims defective dyeing processes cause color fading in garments 8522
Shock Steam from ASISA, process and equipment features 6896
silk exposed to sunlight 3308
software programs. Chroma-Calc from Applied Color Systems 8473
solvent assisted dyeing with benzyl alcohol. acrylic fibers. disperse dyes 6858
spray drying of dyestuffs and pigments 2705
spunbonded and meltblown fabrics, dispersion technology 438
static dyeing machinery by Cubotex and Gaston County for hosiery 2761
streakiness. causes from fabric, processes and machines 8479
streaking in knit fabrics causes, solutions 5935
study of advanced technology in dyeing 8503
sulfur and sulfur vat dyes. pad steam and jig methods 414
tailing during reactive dyeing. relation to dye level changes 3634
tailing phenomenon in cold pad-batch process. substantivity rather than lack of liquor circulation 6867
technical advances. cellulosics, wool, nylon, acrylics, polyester 1224
Thermo-Flush from Bayer. removal of hydrolyzate from fibers dyed with reactive dyes 6120
thermosol dyeing. Monfor-Matic fabric temperature monitoring and measuring system 1225
Thies Mini-Soft 140 small-batch piece dyeing system 6897
ultrasound as accelerant 8538
Unicon pressure dyeing system, Rapidflow horizontal pressure dyeing system, Econoflow fabric dyeing machine 6888
vacuum extraction as replacement for intermediate drying in two bath continuous dyeing 1226
vacuum extraction in vat and vat/disperse union dyeing. polyester/cotton fabrics 4456
Vald. Hendriksen VH-Jet 80 jet dyeing machine. test runs with cotton, manmade, knit and woven fabrics 6889
value added by dyeing and finishing techniques 4457
vat and union, using vacuum extraction process. effects on fixation and color strength on cotton/polyester fabrics 439
vat dyes. developments, applications. cellulosic fibers and their blends 3636
Verolan WNT. promotes application, shading, and leveling of various dyes on wool 5195
vertical versus horizontal dyeing and drying installations 3866
wastewater, removal of color, during cotton yarn processing 760
water purification experiments and results 6383
WRONZ study of cross staining. problems when dyeing knops 4443
Xpres sublimating dye transfer marking for reproduction of images onto fabric 1934
yarn and fiber dyeing. optimization of yarn package 1937
yarn coloring system Spraychromatic 081 from IWS 2762
Yarn Fair [1988]. dyeing processes and services such as Dytex Inc. 8206
yarn package dyeing problems examined 8514

DYEING THEORY

agitation and sorption. C.I. Reactive Blue 109 and cotton print fabric 6127
automation in the dyehouse, continuous dyeing, and batching.

tenth SVCC symposium 5216
cationic dyes. ionic distribution coefficients. affinity 5218
coalescence of disperse dyes, testing. hazard during manufacture and application 440
computer simulation disperse dye application to polyester fibers 459
continuous thermal fixation dyeing, particulate dye migration causes and cures 5254
disperse dyed fabrics. affect of finishes on fabric performance 1938
disperse dyeing. mathematical expression of rate constants in empirical rate of dyeing equations 2765
dyer's variables and lightness and chroma 6293
Garment Dyeing Conference at North Carolina State University 408
pore structure, cellulose fiber. thermodynamic affinity 4421
rate of dyeing from an infinite bath, method of calculation 1227
terms defined 4400

DYES
4-phenylazo-1-naphthol. solvent effects on photochemical behavior 1939
acetoquinone and dispersol dyes. potential hazards and handling precautions 753
acid dye interaction with non-ionic surfactants. spectrophotometric studies 4462
acid dye synthesis, 5-substituted 2-thiobarbituric, properties. analytical reagents 444
acid dyes for nylon used with anionic surfactants 5265
acid dyes in nylon films. photodegradation 2768
acid dyes. absorption spectrum, lightfastness and washfastness, conditions for true color 2767
acid, base, chrome, disperse dyes used for acrylic fibers 2744
active dye color cards for cotton fabrics found inaccurate using colorimetric analysis 5198
active dyes with T-index used with cotton fabrics 4463
additive economy in Hungarian industry 4429
agitation and sorption. C.I. Reactive Blue 109 and cotton print fabric 6127
amino and thioether derivatives of dihydroxy anthraquinones 3622
aminoarylsulfonanilidesulfonic acids. synthesis and properties 6907
anthraquinone dyes. technical comparison of AQ dyes with selected replacement products 3623
aromatic azo compounds. reaction with ozone 2327
arylaminoazo dye synthesis. diarylamine derivatives application of dyes to polyester and nylon 1942
arylaminophenyl-2H-benzotriazoles. synthesis 3624
azo acid dyes derived from 3,3'-dinitrodiphenyl sulfone 3625
azo disperse dyes. acetylation studies. thermal stability 8517
azo dyes and dye intermediates. alkoxy groups incorporated to remove mutagenicity 7610
azo dyes and dye intermediates. design of non-mutagenic dyes 7906
azo dyes containing ultraviolet absorber 3626
azo dyes. 5,10-dihydropheno phosphazine ring systems. dyes and intermediates nonmutagenic 7611
azo dyes. binding equilibria described by ion-exchange 6898
azo dyes. degradation by cell-free extract from var. 24B Aeromonas hydrophila 1228
azo dyes. EPA testing of C.I. Disperse Blue 79. biological wastewater treatment systems 7907
azo dyes. photofading interaction with stilbene fluorescent brightening agent. effect of nickel salt treatment 2769
azo. chelates formed between metals and dyes. spectrophotometric and potentiometric studies 1229
azodisperse dyes. synthesis 6128
basic dyes. aggregation in aqueous solution in presence of polyelectrolytes 460
Basilen Gold Yellow E-2R. monochlorotriazine reactive dye from BASF 5255
Basilen Yellow M-8GD. dichlorotriazine reactive dye from BASF 5256
batik with azoic and direct dyes. study of optimum wax or wax blends 6859
Bayer Levafix dye series in cold pad-batch process 3621
Bayer Levafix E, EA, and EN. structure, properties, reactivity, and affinity 4458
binding kinetics of nonionic azo dyes by beta-naphthalene sulfonic acid-formaldehyde condensates 6908
blue zircon pigment. mechanism and kinetics of synthesis 3627
BTRA conference papers. dyeing of polyester, cotton, and their blends 3579
C. I. Pigment Yellow 60. crystal data 6905
carbodiimides in a range of alcoholic solvents. fixation 3593
carboxylated and phosphonated reactive dyes. fixation on nylon fiber substrates 426
cationic dye sorption by acrylic fibers. Donnan approach 8481
cationic dye. interaction with polyvinylpyrrolidone. desorbing process 2770
cationic. equilibrium sorption interactions with acrylic fibers 418
chromatic active dyes for woven wool fabrics 1230
chromotropic acid and 8-hydroxyquinoline azo derivatives. infrared spectral studies 1943
classified into nine types, seven methods of printing. drycleaning procedures for fabric finishes and trims 6081
cochineal. chemical colorants in Polish and Armenian cochineals 1231
colorfastness of chitosan treated silk 3653
Colour Index International. dyes and nomenclatures 7958
Colour Index International. supplemental dye and colorant technical, structural information 7959
continuous dyeing of cotton with economical use of steam 3620
conversion ratios for ICI Procion H-E, H-EXL, H(P), and MX dyes (Trade Lit.) 8518
cotton and cellulosic knitted materials, reduction of dyestuff consumption 7627
cotton, cotton/polyester knit fabrics, dyed with leuko ester dyes, effects 4353
Datacolor System from Datacolor. quality control and recipe formulation and storage for dye industry 8472
Datacolor's system, dye recipes, quality control 406
definition of dyeing. trade names and description of dye types 8477
determination of rheological properties of dyestuffs 3862
developments [1986-1987]. fastness testing. liquid dyes. blend dyeing 6862
developments, improved Soviet products 5166
dictionary of trade names of dyes and related chemicals. continuation 7612
dicyanovinyl-substituted dimethoxybenzenes. absorption spectra 6909
digital color images concerted to areal dye densities for halftone hardcopy device 3580
directory new dyes developed [1987]. properties and applications 1208
disperse and fiber reactive dyes used in wet printing of rayon and polyester/rayon blends 466
disperse azo dyes. anionic surfactants. wastewater toxicity reduced 7909
Disperse Blue 79 degradation in the waste activated sludge process 7905
disperse blue dyes. synthesis of nonanthraquinoid blue chromophores. substituted thiophenes and thiazoles 7613
disperse dyes and methacrylic acid grafted polypropylene fibers 3628
disperse dyes of varying molecular weights. heat setting and effects on dye uptake of textured polyester 6865
disperse dyes with high molecular weight studied with regard to finished fabric 1938
disperse dyes, coalescence. testing. hazard during manufacture and application 440
disperse dyes, exhaust values and kinetic parameters. rapid dyeing systems for polyester 4431
disperse dyes. optimizing molecular weight and concentration of polyethylene glycol 1216
disperse dyes. water solubility and octanol-water partition coefficients to predict chemical concentrations in sediments

7908
disperse reactive dyes for polyamide fibers. synthesis. fastness properties 445
disperse. transfer printing with crosslinking agents and high frequency electrical field 8533
dispersion, cause of lightfastness on nylon, tests 5266
Drimaren CDG reactive dyes manufactured by Sandoz. dyes in granular form 5257
dyeing and finishing wastes. storage, buffering, detoxifying of effluents 3144
dyes in water source, toxicity, tests 5550
effect of dyestuff properties on dyeing methods 7614
effluent load reductions, other benefits from changes in dye and dye intermediate manufactures 7912
ethoxylated amphoteric compounds and acid dyes. wool fibers 6902
evaluation of chemicals and auxiliaries for dyestuff classes 6910
exhaustion dyeing. Sandoz Foron RD dyes. maximum effect with polyester 4460
extrusion polymer coloring concentrates, quality pigments and dyes 3266
fixation yields. impact of vacuum extraction on continuous dyeing of cotton with reactive dyes 424
flax/polyester. reactive dyes. thiocarbonate built-in catalyst 7588
Flexnip from Kuesters. low capacity liquor application mechanism 5233
fluorescent coumarins and quinolines. summary of research at University of Bombay 7615
foam dyeing Levafix Blue E-RA and Levafix Brilliant Red E-4BA 1944
foam dyeing machine for small dye lots 6119
formulation and reserving agents for even dyeing of angora, wool, and nylon blends 4436
German Dyers' [1988] industry yearbook 2714
Gryfalan metallic dyes from Organika (Poland). wool and nylon dyeing, tests 4459
Guar Gum. printing with disperse and reactive dyes 1249
Helizarin White RTN. titanium oxide preparation from BASF used in printing 5258
human hair dyes. synthesis and structure determination 1232
ICS-Texicon DS-3 laboratory microdosing measurement system for liquids 3937
indigos. reaction with ozone. mechanisms and products 2771
Indosol Navy SF-GLE from Sandoz for cellulose fibers 5259
industry. international overview. history, evolution, future changes 7584
innovations in dyes in last twenty years. trends, changes 4465
Japan. [1985-1986] production data 8515
Kensaikan's Scotdic color coding system. Hoechst's assistance program 6102
laboratory converted into an automated production center 2733
Lanasan CF and Sandolan MF from Sandoz 6895
Levafix cold pad-batch dyeing processes 4451
lightfastness of anthraquinone dyes 7616
lightfastness of sulfur dyes, relation to dye concentration and fabric type 457
lignosulfonate dispersants. effect of cation type 4453
Lithospermum dye used for silk fibers. high colorfastness 6114
Luprintol FBT. binder and film former in transfer-paper printing with Bafixen dyes from BASF 5191
machine-washable wool. effects 7598
Mamluk carpet, study of dyes and mordants used in Cairene workshops 5260
manmade fibers, developments 6110
mass diffusion of dye molecules in polymer matrix 6317
mathematical models forecast dye behavior in the environment 3142
mauve from coal tar benzene discovery. history 7617
membrane filtration used to produce desalted and concentrated fluid dye compositions for dyeing leather 5267
metal complex and the photodegradation of silk. protective action of cobalt complex dye 7597
metal-containing polymeric dyes control polymer degradation 4466
metalized. fixing on wool by radio frequency. experimentation 6883
methyl orange acid dye. binding mechanism with nylon. hydrophobic interaction 427
microwave oven dyeing by Dylon 4449
modified phenothiazines used as dyes and pigments. chemistry 7618
monoazo disperse dyes. dyeing equilibrium using nylon 3629
monoazo dyes. synthesis and properties 6911
naphthalene derivatives. proton magnetic resonance spectra 1945
Natural Dye Research, Sixth Annual Meeting. highlights 2766
natural dyes. suitability of industrial dyestuffs and alternative to synthetics 6912
Neolan Blue 2G. uptake by mohair and kemp 7592
new vat dyes by Sandoz. chemically safer process replacing solvents with water 8519
NMR spectra of azo dyes interpreted with respect to azo-hydrazone tautomerism 441
non-ionic azo dye. binding equilibrium. effect of degree of condensation 1233
non-mutagenic dyes. replacing benzidine residue with non-carcinogenic agents 448
non-mutagenic dyes. replacing carcinogenic dye intermediates with safe chemicals 447
nonionogenic surfactants and influence of dyes on turbidity 3630
Nylosan Blue C-BGL and Nylosan Blue E-BGL acid dyes from Sandoz for polyamide fibers 5261
packaging requirements and methods 1234
packaging, problems of dispatching and export 1239
Palanil Navy Blue RN. disperse dye from BASF for polyester and polyester and cellulose blend piece goods 5262
phosphonic acid reactive dyes for cotton 1946
photofading. mechanisms. recent developments. dye and pigment sensitized photodegradation of polymers 3638
pigment colors for garment dyeing 5250
polyamide-containing goods. dyeing parameters 8489
polyazo dyes. annelation effects on absorption spectra 8520
polyester fabric dyeing. barriness, striping. causes. migration behavior of disperse dyes 7594
polyester/cellulose blends. new printing reactive dye fixation in neutral pH conditions 3601
printed cotton fabrics, washing parameters, dependence on dye type 5310
purple dyes from M trunculus shellfish. dyeing controversy 1235
quality control and inspection. residual color deviation studies 448
rapid dyeing systems, best dyes for use. basic dyes for acrylics, reactive for cellulose fibers, and disperse for polyesters 5268
reactant fixable dyes on cotton fabric. fastness properties 8488
reactant fixable dyestuffs for better washfastness 8431
Reactive Blue 109 and cotton printcloth. correlation of half-times of sorption and dyebath agitation 434
reactive dye developments from Jaysynth Dyechem 3632
reactive dyes and cellulose. diffusion and simultaneous reaction 6874
reactive dyes from Jaysynth Dyechem in Bombay 6914
reactive dyes in continuous dyeing processes 1222
reactive dyes, failure during cleaning on one hundred percent cotton pinstriped and oxford shirts 7000
reactive dyes. fixation with conventional and foamed silicate systems 3631
reactive dyes. greatest share in domestic market. work well with cotton. domestic dye production figures included 5269
reactive dyes. intermediate fixation reaction products of phosphonated and carboxylated dyes 1236
reactive, disperse, pigment dyes in continuous dyeing of polyester/cellulosic fibers 435
reactive, in exhaustion dyeing. new developments. 55th ACIT at Rouen 6099
reactive, resist printing 5270
reactive. Ciba-Geigy. dyes and systems for garment dyeing 7607
reactive. color changes from DMDHEU presence during resin finishing 8550

reactive. comparison of powder, liquid and granulated forms. new Drimaren CDG 6913
reactive. microwave fixation on cotton 6903
reactive. printing with synthetic thickeners 5288
reactive. uses in exhaust dyeing 5249
red madder and insect dyes on ancient textiles identified by thin-layer chromatography 7619
redox system used with direct dyes on cotton and mercerized cotton 8513
reduction of disperse azo dyes in bottom sediments in the environment. potential hazards 7914
relative contact level dyeing. factors. maximum levelness 6866
Remazol dyes in home usage 4426
Remazol dyes. tested for dischargeability 1940
Royal Purple, reconstruction of ancient dye preparation process 5263
safety practices and industrial hygiene 754
Sandolan MF dyes for wool 2750
Sandolan MF dyes. applications in automated systems 442
Sandolan MF range for wool 5222
Sandolan MF range from Sandoz. characteristics, results 6115
Sandolan MF range. new dyes for wool 5223
Sandolan MF. dye range for wool 1941
Sandoz Drimarene dyes discussed at recent symposium 5312
Sandoz Foron AS dye for polyester. lightfastness in automotive fabric applications 6906
Sanylene F pigments from Sandoz for mass-dyeing fine-titer polypropylene 8490
Sanylene F polymer melt soluble dyestuffs 6111
selection for wool. technical and economic criteria 2752
silk and reactive disperse dyes 3654
solubility parameters for transfer printing of cotton pretreated with ethylene glycols 2776
solubilization during extrusion of polypropylene. effect on colorfastness 2738
sorption isotherms. azo dye fate predictors in activated sludge wastewater treatment process 7915
sorption of cationic dyes by oxycellulose and acrylic polymer fibers 449
studies on new reactive, direct, azotic, gray, vat, changes in dyes, dyeing industry 4464
styryl and azo dyes for polyester fibers. derivatives 7620
substituted 8-(arylazo)-7-hydroxy-4-methylcoumarins. spectrophotometric studies 4467
substituted diamino-2-methoxy anthraquinone dyes. fastness properties 2739
sulfur and sulfur vat dyes. pad steam and jig methods 414
sulfur dyes in garment dyeing 7621
synthesis of 1-amino-2,4-dichloro anthraquinone of high purity 451
synthesis of 2-hetaryl naphth[2,1-d] oxazoles with different substituents in the naphthalene moiety 452
synthesis of 2-hetarylnaphth[1,2-d] oxazole derivatives containing 5-cyano, 5-acetamido, and 4-carbonyl derived substituents 450
synthesis of 9-acridanones by Chapman reaction 6915
synthesis of arylamino azo dyes by Chapman reaction. applications on polyester and nylon 3633
synthesis of arylaminodiaryl sulfones by the Chapman reaction, diarylamine derivatives. synthesis 881
tailing during reactive dyeing. relation to dye level changes 3634
tailing phenomenon in cold pad-batch process. substantivity rather than lack of liquor circulation 6867
technical advances. cellulosics, wool, nylon, acrylics, polyester 1224
Tectilon Yellow 3R. Ciba-Geigy 5264
Telon Yellow FRL 200. acid dye from Mobay which eliminates unlevelness in carpet dyeing 8516
textile dyes and chemicals. dictionary of trade names 7622
textile dyes and pigments. potential hazards and handling precautions for cuprodiazol, diazol, procilene PC 755
textile printing, dyeing and finishing chemicals. trade names 6810
textile wet processing, products review 1178
Thermo-Flush from Bayer. removal of hydrolyzate from fibers dyed with reactive dyes 6120
thermomigration. polyester fibers 6881
thiacyanine dyes. reduction potential and electron affinities 3635
thiadiazole disperse dyes with trifluoromethyl group 6916
thioanthraquinone dyes. synthesis and properties 6917
thiophene derivatives used as optical brighteners and disperse dyes on polyester 7554
toxicity 7194
trade name listing 7241
trade names of textile dyes and related chemicals. dictionary 7623
UltraScan spectrophotometer by HunterLab 6291
ultraviolet stabilizer moiety incorporated into commercial dyes used for synthetic fibers 7624
United States dye producers see better times ahead. profile of major companies, products, market position 6857
vat dyes in printing pastes. dispersion, coloration, recommendations 4479
vat dyes. applications, factors in selection of dye type 1947
vat dyes. developments. applications. dyeing and printing cellulosic fibers and their blends 3636
viscose fiber dyeing. adsorption of Congo Red 4442
viscosity measurement 6918
viscosity, test methods for measuring liquid dyes 7625
viscosity 3860
washing simulator, dye resistance tester 4682
wastes entering landfill via sludge from biological treatment plants 7911
wastes removed via electrochemical cell. chemistry, costs. pilot studies 7910
weathering test methods 4692
wool and cotton blends 1923
wool dyed with cochineal. effects of traces of calcium and magnesium ions in water 7626
wool dyeing and finishing. dyestuff selection, dyeing machinery 6116
wool piece dyeing. chemicals and machinery 5226
wool/nylon fiber dyeing, method, machinery, dyes, drying 430
woolen yarn. interaction of neodymium chloride with dyestuff 5271
XRD reactive disperse. for polyester/cellulose blends in one step process 443
yellow zircon dye. synthesis from oxides of silicon and zircon using thermal process 6919
Zh orange acidic polyamide dye on nylon fabric using ammonium sulfate 4461

TEXTILE TECHNOLOGY DIGEST

SUBJECT INDEX

Part 2

January-December 1988

INSTITUTE OF TEXTILE TECHNOLOGY
CHARLOTTESVILLE, VIRGINIA

© Copyright 1989 by the Institute of Textile Technology.
May not be reproduced without written permission.

The *Textile Technology Digest* is published monthly by the Institute of Textile Technology, Charlottesville, Virginia 22902, to provide abstract coverage of current periodicals, books, and patents in the field of textile technology. In preparing this annual index the staff endeavors to reflect correctly the contents of the original material. Printed in Charlottesville, Virginia, by Litho Artists, Inc. Annual subscription: $330.00.

SUBJECT INDEX

January - December 1988

In using this index, look under specific subjects. If the information wanted is not under a specific subject, look under a broader heading. Whenever possible, look under specific process. For example, information on the bleaching of cotton will be under BLEACHING: cotton (not under COTTON: bleaching). For fiber information not involving specific processes (as properties, etc.), look under the names of fibers. Use cross references and look at other headings beginning with the same word. The "see also" cross references are designed in part to limit the number of entries in the index for a given document; an abstract usually is not indexed under more than one group of headings joined by "see also" references. For many processes there will be separate headings for machines, as DRAWING and DRAWING MACHINERY.

ECONOMICS, SEE COSTS, FORECASTS, MILL MANAGEMENT, TEXTILE INDUSTRY.

EDGE CRIMPING, SEE CRIMPING, CRIMPING MACHINERY.

EDUCATION, SEE TEXTILE EDUCATION.

EFFLUENTS, SEE WASTE TREATMENT--EFFLUENT.

ELASTIC FABRICS (SEE ALSO OTHER HEADINGS, SUCH AS HOSIERY, STRETCH FABRICS)
bandages. Metap knit-weaving for production 4297
Bonas, Mueller and Mageloa elastic fabric looms 5094
Darlexx from Darlington Fabrics, elastic fabric with polyurethane thermoplastic film laminate. types, manufacture 6019
diapers, disposable. nonwoven fabrics 6058
high performance fabric for winter sports. WB 400 from Schoeller Textil 8378
ITMA [1987]. machines for narrow fabrics. labels and elastics. computerization 6649
ITMA [1987]. warp knitting machinery 5085
Kimberley-Clark develops new elastic diaper cover 6223
melt blown webs. ethylene copolymer resins 5668
production on RSE 4 N-1 elastic raschel machine 1028
spandex. durability of hand 6748
stains on elastic waistbands. causes, remedy 7010
synthetic vascular graft for blood vessels smaller than six millimeters in diameter 7744
tricot HKS 3 machine from Karl Mayer 5083
web geometry, anisotropic. modeling 6020

ELASTIC FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS SPANDEX FIBERS)
copolymers of rigid and flexible molecules, process 3298
Dorlastan. formation, advantages and uses 5815
Du Pont's expansion plans for Lycra Silken Sheers hosiery 3873
Du Pont's Lycra spandex, impact on hosiery and apparel industry 3260
Lycra spandex, popularity, future expectations, fashions, properties 1652
Lycra, elastane fibers. history. development. markets. Du Pont's role 8045
Lycra. Du Pont's expansion plans 4857
orthopedic casting tape, knitted structure. combination of glass and elastic fibers 7468
polyurethane and polyacrylonitrile. phase inversion, dynamic mechanical properties 8122
polyurethane. fiber uses 3310
polyurethane. influence of hard segments on modulus, tensile recovery 8131
segmented polyester/urethane polymerization. hard segment distributions 8125
spandex. production, structure, properties, and end uses 4043
thermomechanical properties of elastane fibers studied to control elasticity 4044
transverse elastic moduli of unidirectional fiber composites, mathematical formula 1440

ELASTIC YARNS (SEE ALSO OTHER HEADINGS, SUCH AS CORE YARNS, TEXTURED YARNS)
Du Pont expands Lycra production capacity 6615
spandex fibers. pure, wrapped, corespun in fabrics 8046

ELASTIL IS A NYLON 6 TEXTURED YARN.

ELASTOMERIC FIBERS, SEE SPANDEX FIBERS.

ELASTOMERS (SEE ALSO OTHER HEADINGS, SUCH AS RUBBER PRODUCTS)
Creaset, fixes creases or pleats with silicone elastomer 5381
developments in polyurethane products and applications 3299
Kimberly-Clark obtains patents for processes and products involving thermoplastic elastomeric polymers 2458
reinforcing thermoplastic elastomers with aramid fibers 7479
shock-absorbing pad for shod animals 8379

ELECTRICAL EQUIPMENT (SEE ALSO OTHER HEADINGS, SUCH AS AUXILIARY EQUIPMENT, BLANKETS, COMPUTERS AND PROGRAMMING, DRIVES, ENERGY, INSULATION, MILL BUILDINGS)
conductive carpet to protect computers and other electrical equipment from static electricity 7034
FA/S spark eliminator from Jossi built into the flock conveyor line for spinning plants 3345
forces on yarn obtained by transducer mounted on needle from Oy Tech Center in Finland 7066
Haug ionization systems to discharge static electricity during finishing 5165
inductive transducer tests change of length in ropes and cords due to extension 6285
monitoring, Baeckmann CMOS rheostat for textile monitoring technology 4726
Nitto Beseki designs bonded glass fabric for printed circuit boards 6764
Saurer electric drive unit for embroidery machine operation 6983
types, cost of use 1729
wet-finishing machinery from Benninger equipped with alternating current drive to process stretch fabrics 5173

ELECTRICALLY CONDUCTIVE FIBERS, SEE EPITROPIC FIBERS.

ELECTRON MICROSCOPY (SEE ALSO OTHER HEADINGS, SUCH AS CHROMATOGRAPHIC ANALYSIS, COLOR MATCHING, FABRIC TESTING, FIBER TESTING, TEXTILE NUCLEONICS, RADIATION, RADIOACTIVE TRACERS, SPECTRUM ANALYSIS, X-RAY)
abrasion of fabrics based on air textured yarns. SEM study 7477
coagulated PBT fibers and films. microfibrillar morphology 2484
comparison of sizing effectiveness 7088

deposition of silver sulfide in fibrous polymers to enable optical, electron microscopic study 7084
deteriorated silks evaluated with scanning electron microscopy and energy dispersive X-ray spectrometry and dye analysis 7283
diffraction contrast transmission electron microscopy reveals crystalline ultrastructure of flax 6467
evaluation of subchronic pulmonary response to cotton dust exposure 8879
fiber and fiber blend identification 1442
fiber diameter. measurement methods compared 4653
microanalysis. surface. uses of EDAX analyzer fitted to SEM 3836
ramie. cross-sectional and longitudinal views 5618
SEM, working principle. use with fibers, yarns, fabrics 3969
soil and soil removal. analysis 4583
soiling and soil removal. identity and distribution, residual soils 582
surface resin rich graphite fiber composites. adhesively bonded. fracture. SEM/XPS analysis 2644
textile research. uses and description 5561
ultraviolet sensitivity. effectiveness of optical finishing agents, on wool 4649
wool fibers after cuticle removal 8689

ELECTROPHORESIS, SEE CHROMATOGRAPHIC ANALYSIS.

ELECTROSTATIC PHENOMENA, SEE STATIC ELECTRICITY.

ELURA IS A MODACRYLIC FIBER.

EMBOSSING (SEE ALSO OTHER HEADINGS, SUCH AS CALENDERING)

EMBROIDERY
Berlin wool work of the nineteenth century, technique described 2021
broderie perse used in quilts based on Oriental rugs 4550
buyers guide. embroidery, pleating. machinery and services 538
chairs upholstered with needlepoint 7683
chatelaine pincushion. binding stitch and counted thread work 4542
compensation stitches, definition and demonstration 4543
computerized. Saurer SEMCOS Atelier/Artist embroidery design software 4533
conservation 7697
Douglas Johnson. fiber artist specializing in embroidery of still lifes and medieval motifs 2022
history. exhibition from Germany late Middle Ages. priests' vestments in linen and wool 4610
Hmong textile art called pa ndhav, which translates as flower cloth 4532
India. Barmer embroidery. technique, materials 2023
Karen Doty. fiber artist specializing in embroidered portraits 2024
Kurenai Kai. Japanese embroidery school 4540
lacis. history and technique 1286
Lesage. leading embroidery firm in world 2841
machines. variables in the process. experiments 2026
Madeleine Colaco. Brazilian fiber artist specializing in embroidered tapestries 2997
Mary Cummings, Incorporated. hand embroidered dresses 2025
needlepoint at English Textile Artists exhibition, Stuttgart 4632
needlepoint for chair covers 7684
portraits of Victoria Weill in needlepoint 8656
Quaker Tapestry celebrates history of Quakers. a group effort of Quakers around the world 4541
samplers in cross stitch. model or pattern cloths, history traced 2027
sashiko 5379
scallops, techniques 2028
shawls. Russian. origins, technique, history 6962
Silver and Simmonds, British manufactures. profile 539
Twin Panda introduces line machine embroidered bed linens and accessories 3018
Voodoo banners used in ritual, designed by Haitian Voodoo priests 1404
winners of German Bobbin Association competition for bobbin lace works 3719

EMBROIDERY MACHINERY
Bobbin Show [1987]. embroidery and monogramming highlights 543
computerized. Saurer SEMCOS Atelier/Artist embroidery design software 4533
electric drive system for embroidery machines from Saurer 3712
electronic pattern processing. Saurer developments 2015
IMB [1987]. preview of multi-head embroidery machines and accessories 6188
ITMA [1987]. CAD/CAM for pattern programming. broad width machines for Schiffli embroidery 6677
ITMA [1987]. embroidery machine highlights 2029
Saurer electric drive unit for embroidery machine operation 6983
Saurer Pentamax. control over complete embroidering positions 6984
Schiffli. impact of computers and technology 7685
ZSK-Stickmaschinen Gesellschaft. embroidery machinery and controls 540

EMPLOYEE TRAINING (SEE ALSO UNDER OTHER HEADINGS, SUCH AS MANAGEMENT, PERSONNEL MANAGEMENT, LEGISLATION, NOISE, INDUSTRIAL ENGINEERING, INDUSTRIAL HEALTH AND SAFETY)
Celanese Fibers. quality improvement program 3882
conference, West German Dyer's [1988] 6830
German textile apprenticeships. attitudes toward work and careers 3997
improving skills of ring frame tenters, methods 8767
Job Change Incentive management strategy resulting from Quick Response technology 3877
productivity. better-educated work force needed for United States to remain competitive in future, testimony before JEC 4785
selling oriental rugs. training program stresses product knowledge and face-to-face selling 2242
stitching technique. machine and operator factors 8611

EMULSIFYING, SEE DETERGENTS, SURFACE ACTIVE AGENTS, TEXTILE CHEMICALS.

ENCRON IS A POLYESTER FIBER.

ENERGY (SEE ALSO UNDER OTHER HEADINGS, SUCH AS AUXILIARY EQUIPMENT, ELECTRICAL EQUIPMENT, MILL BUILDINGS, POWER CONSUMPTION, AND UNDER HEADINGS OF SPECIFIC TEXTILE MACHINERY OR PROCESSES)
adsorption. low velocity impact testing graphite fiber composites 6306
ATME-I [1989], part of Foreign Buyer Program 6391
biogas from willow dust. plant studies 3929
biogas plant for using willow dust and other textile waste. CTRL design 3930
biogas production from willow dust by dry anaerobic 3931
Bobbin Show [1987]. bindings, elastics, narrow fabrics, and webbings. suppliers and products 341
Casto 6L process for wet spinning. reductions in time and energy expended 7195
chemical processing in India 5161
clamping and cross-sectional rotation of laminates 6319
commercial cotton gin drying systems. current research and potential for improvement 6438
conservation in dyeing procedures results in reduced costs 3596
conservation in Indian textile industry 1521
conservation in processing cotton fabric. steam 1520
conservation in textile industry. electricity, fuel, steam, heat 1519
conservation in weaving. warp tension most influential. testing 4211
conservation in wet processing. preparation, dyeing, printing. textile effluents 7555

conservation, flow chart value analysis 3900
conservation, steam in jute mills 3933
conservation. effect of fuel components on energy economy 729
conservation. investment, benefits. new processes developed by AFME 7181
consumption analyzed based on energy transfer-conversion. dyeing and printing mill in Shanghai 7182
consumption and potentials for conservation. United States textile industry 7180
consumption reduced with Superba's range of One Yarn Spirovap machines 3383
consumption. shuttle looms 6854
cost, controllable. Australian textile industry 3928
costs in scouring wool. choice of natural gas 5619
cotton ginning process control system. simulation model minimizes processing and energy consumption 6444
dielectric perturbation of components in blended yarns 6699
dyeing costs. possibilities for reduction without compromising quality 7583
energy and cost saving in old and new wet finishing equipment 3138
gas fired liquid heating systems in dyeing operations. benefits of use 5528
heat recovery system for automatic tumbler dryers 8901
heat recovery systems. performance review and assessment. reducing energy costs 7895
Hungarian conservation methods, energy, materials, with new machinery 4746
ITMA [1987]. machinery for women's hosiery by Savio Matec 8284
lighting in textile facilities. reduction in power consumption 3932
lignosulfonate size saves energy 4999
liquid heater for hot baths. role of steam 6080
machine developments. cotton composite mill conservation during bleaching, dyeing, printing, finishing, and effluent processes 2303
modernization of textile mills. energy efficiency 7191
Monsanto Chemical, comprehensive energy balance project 6333
power regenerated from motors during extrusion process 8074
printing and finishing operations, energy conservation, effluent control 6819
pump speed and flow pressures during loose-wool dyeing 6887
radio frequency drying polyester/cotton warp yarn in sizing process 5837
recycling heat energy from wool drying procedures, cost reduction in wool mills 4734
reduced consumption. closed constrictors in air jet looms 5873
reduced consumption. dyeing, low bath ratio 5213
reduced energy costs. spinning, weaving equipment. rotary screw air compressors 5540
reduced processing costs and power consumption. Fratelli Marzoli's Model PX1 combing machine 5735
reduction in exhaust dyeing. technical advances 437
reduction, modernization of tentering machinery, resultant savings 4506
reuse of wastewater's heat, method. cotton finishing 5529
reusing heat energy from dyeing waste water 4735
savings at Timmele Dye House in Sweden with heat recovery system 5277
savings due to a-c motor controls with centrifugal fans and pumps 7244
savings. wet-in-wet resin finishing 4493
Techtextil and SNIA Fibre. innovation for monofilaments 4045
Techtextil. introduction of new Courtaulds Actipore products 4042
Techtextil. synthetic fiber innovations 4786
textile finishing, French. uses for natural gas. future development 6813
thermal exchanger reuses heat energy from steam and water during drying 5530
tower drying systems for cotton. improved drying efficiency 6457
towerless seed cotton drying systems. new devices and arrangements. advantages 6458
transverse crack initiation and multiplication in symmetric cross-ply laminates 6323
trends in consumption. Financial Times Conference, paper 2238
wastewater's heat from finishing processes. conversion to energy for dyeing 5272
weaving. study of energy costs involved 5892
wet on wet processing improves natural fabric quality and reduces energy consumption 6083

ENKALURE IS A NYLON FIBER.

ENVIRONMENT (SEE ALSO OTHER HEADINGS, SUCH AS AIR POLLUTION, DUST, FILTERS, INDUSTRIAL FABRICS, WASTE TREATMENT--EFFLUENT, WATER)

2800 Club in Spartanburg County, S.C. formed by chemical producers to comply with Title III of SARA 748
acoustic baffling wall, flexible, made with Trevira polyester from Hoechst 6037
agricultural herbicides and pesticides replaced with biodegradable, fiber-based compounds 750
alkaline waste water neutralization with flue gas 2322
azo dyes and dye intermediates. design of non-mutagenic dyes 7906
azo dyes. EPA testing of C.I. Disperse Blue 79. biological wastewater treatment systems 7907
bag filter fabrics. evaluation in pulverized fuel fired boiler applications 7519
biodegradable plastics. research and development 8422
bleaching, chlorite. process. economical, environmentally safe 6823
Budaflax Mill, environmental protection measures 4756
Casto 6L process for wet spinning. reductions in time and energy expended 7195
chemical processing in India 5161
conference, West German Dyer's [1988] 6830
disperse azo dye wastewater toxicity reduced 7909
Disperse Blue 79 degradation in the waste activated sludge process 7905
disperse dyes. water solubility and octanol-water partition coefficients to predict chemical concentrations in sediments 7908
drycleaning solvents and vapors may result in neurological damage with symptoms similar to Alzheimer's disease 1538
dye wastes entering landfill via sludge from biological treatment plants 7911
dye wastes removed via electrochemical cell. chemistry, costs. pilot studies 7910
dyes in water source, toxicity, tests 5550
effluent load reductions, other benefits from changes in dye and dye intermediate manufactures 7912
emissions. smoke from textile finishing operations eliminated by tubular electrostatic precipitator 751
environmental auditing practices 3143
finishing. combined bleaching and scouring. sodium chlorite 6824
garbage disposal. laws and provisions concerning 6379
garment dyeing. filtering and removing stone residue from wastewater 8509
geomembrane lining system to contain ash from incinerator 7767
geotextile polypropylene liner in concrete storage tank for contaminated brine from petrochemicals 8664
geotextile polypropylene nonwoven under dike across retaining pond for run-off from coal mine 8665
German environmental statutes and drycleaning practices 2050
high performance polymer matrix composites. deterioration in aerospace environments 7500
hydrocarbons, volatile chlorinated. West German ban in washing and cleaning agents 4577
hydrogen chloride and ammonia sorption by carboxyl-group containing fiber 7913
Impinjet scrubbers for dust collection, gas absorption, stripping of gases, gas cooling, vapor condensation 5549
Lake Como. studies of the lake's ecosystem. chemical make up and effects of industrialization on fish population 7196
liquid cooled undergarments and air cooled vests tested under

varying environmental conditions 7734
localized electrostatic precipitation versus exhaust ventilation for controlling dust in asbestos mill 8907
mathematical models forecast dye behavior in the environment 3142
Microscan from Beacon Controls. computer system designed to operate in hazardous areas 4713
Mirafi 500 polypropylene lines oxidation lagoon in Louisiana for treatment of wastewater 7762
mothproofing. active ingredients. environmental concerns 5303
new prepolymer containing no Volatile Organic Compounds, for coating 472
new vat dyes by Sandoz eliminate need for intermediate raw materials from offshore sources and replace solvents with water 8519
notched carbon fiber composites. effect of environment on fatigue loading 7503
Pakistan. pollution from textile wet processing industry 6378
phosphorus and detergents, effects. conference in Bergamo 5545
phosphorus levels in water. legislative control 5546
protection. reduced detergent requirements for laundering. German research 7671
reduction of disperse azo dyes in bottom sediments in the environment. potential hazards 7914
scouring raw wool with Freon TF solvent reduces pollution 8463
solvents in drycleaning. recycling and limiting environmental exposure 3951
sorption isotherms. azo dye fate predictors in activated sludge wastewater treatment process 7915
standards, company audits verifying compliance 752
sterilization, hydrogen peroxide vapor 5819
Superfund Amendments and Reauthorization Act [1986]. control of chemicals used at manufacturing plants 749
surface active agents, alternatives to alkylphenolethoxylates in textile processing 7198
surfactants. problems 6376
Tencel. production processes have lower environmental impact than viscose rayon 4835
treatment of polluted water in printing houses. problem of regeneration of resin 7203
wastewater treatment safer with carbon dioxide than sulfuric acid at Greenwood Mills 8912
West German textile industries and new air quality requirements 3947
West Germany, postwar textile developments. VTCC fortieth birthday 6419
West Germany. regulating solvents and other chemicals used in drycleaning 3949

ENZYMES (SEE ALSO UNDER OTHER HEADINGS SUCH AS DESIZING, DETERIORATION OF MATERIALS)
Aquazym and Termamyl desizing enzymes from Novo. process description 1908
bacteria and extracellular catabolic enzyme activity. softening of hard root cuttings of jute 828
desizing. recommendations and findings of ACIT conference 6091
fibers, enzyme-containing, with milk-coagulating activity 80
laundering, industrial, usefulness of enzyme technology 7713
Lipolase from Novo Industries for detergents. low temperature use 7005
proteases. dissolution of casein component of Chinon fiber 8129
starch processing by enzymes 185

EPITROPIC FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS HEALTHCARE AND MEDICAL TEXTILES)
brominated carbon fibers produced via intercalation process. electrical properties 8024
coating fibers with superconductor material by chemical vapor deposition 6948
conductive fibers. absorption, scattering, thermal radiation 7801
copper sulfide-containing bemberg fiber from Asahi, electrically conductive and antibacterial properties 5678
cupra fiber from Ashai Chemical 7315
electronically conductive fibers in a form of plastic, Lode Soens of Belgium. material properties 1893
glass fibers from General Electric 8054
Lantorine. aluminum nonwoven surfacing tissue used for conductive composites 5996
Lenzing viscose fibers incorporating carbon 3315
Lenzing's viscose rayon fibers with carbon, Viscostat and Viscocarbon 3314
nickel cations in wastewater from manufacture of electrically conducting fibers. ion-exchange method of purification 5557
Nitril-Static carpet fibers, reduce static electricity, test results 4037
Nitril-Static copper/polyacrylonitrile anti-static fiber. production and uses 4036
Nitron. reaction with nickel during chemical metalization 4893
polyacetylene fibers. electrically conductive 5713
superconducting, high temperature fibers from organometallic precursors 8055
Texmat fibers. Ricem B 83 polyacrylonitrile fiber coated with nickel and copper for antistatic textiles 8089
Texmat 5636
vapor-phase-grown carbon fiber. production. characteristics 8027
viscose fibers with carbon black added for electrical conductive material 3317

ERGONOMICS, SEE ENVIRONMENT, INDUSTRIAL ENGINEERING, INDUSTRIAL HEALTH AND SAFETY, LEGISLATION, NOISE, PERSONNEL MANAGEMENT.

ESTERIFICATION, SEE CHEMICAL MODIFICATION.

ESTRON IS AN ACETATE FIBER.

EVENNESS OF YARNS, SEE YARN QUALITY, UNIFORMITY.

EXHIBITIONS (SEE ALSO OTHER HEADINGS SUCH AS CONFERENCES)
A+A Exhibition. protective clothing and nonwovens 8648
AATCC conference and exhibition highlights. dyeing, printing, shade quality 379
ACHEMA [1988]. plant design and machinery for manmade fiber production 8747
Action Sports Retailer trade show. surfwear market for men 2926
advanced composites on display at SAMPE 6742
apparel machinery at New York Hilton. Lectra's electronic pattern scanner, sewing machines 6166
Apparel Sourcing Fair [1986]. Auburn University. meeting of manufacturers, contractors, retailers 5585
Atlanta Winter [1988] carpet market. dealer enthusiasms, prominent design style trends 2157
ATME-I [1988] space sold out. weaving, knitting, dyeing, printing, and finishing machinery 5536
ATME-I [1988]. fabric forming, printing, dyeing, and finishing machines 8844
ATME-I [1988]. international loom makers plans to unveil technological advances 5089
Baby 16 fair. trends [fall/winter 1988/1989]. attendance, problems, exhibits, trends 2089
Behr exhaust air cleaning and heat recovery system 7893
Big and Tall Men's Apparel Needs show. sportswear 2920
Big and Tall Men's Apparel Show [1988], expanding market 1318
Bindungen exhibition of Rheinland German textile artists 3783
Bobbin Show and Linkage Expo I for retailers. new machinery and production methods 6392
Bobbin Show [1986]. centralized apparel manufacture systems 5364
Bobbin Show [1987], sewing thread, core, spun polyester, filament, cotton, monofilament, specialty 567
Bobbin Show [1987]. advances to improve capacities of rapid supply 3681
Bobbin Show [1987]. apparel manufacturers and their products. interlinings, interfacings, linings 524

Bobbin Show [1987]. CAD systems. uses. developments 6350
Bobbin Show [1987]. computer aided design systems 721
Bobbin Show [1987]. computers and CAD systems 718
Bobbin Show [1987]. cutting and marker making/grading equipment highlights 541
Bobbin Show [1987]. embroidery and monogramming highlights 543
Bobbin Show [1987]. fabric and fiber highlights 301
Bobbin Show [1987]. fabric inspection and chemicals 652
Bobbin Show [1987]. fasteners and trimming. buckles, buttons, fashion snaps, zippers, hooks and loops. manufacturers and products 545
Bobbin Show [1987]. highlights. Quick Response theme. direct linkages within the textile, apparel, and retail complex 739
Bobbin Show [1987]. labeling, packaging and identification products. manufacturers and merchandise 549
Bobbin Show [1987]. materials handling highlights 550
Bobbin Show [1987]. needle trades. United States industry trends 542
Bobbin Show [1987]. pressing, fusing, and laundry products 526
Bobbin Show [1987]. products from Eastman and others 1293
Bobbin Show [1987]. quilting machinery highlights 554
Bobbin Show [1987]. screen printing equipment, suppliers. contract services 468
Bobbin Show [1987]. sewing highlights 561
Bobbin Show [1987]. sewing machinery. developments 566
Bobbin Show [1987]. special purpose equipment 559
Bobbin Show [1987]. trims, manufacturers and products. appliques, emblems, ribbons, embroideries, lace, transfers 306
Bobbin Show [1987]. unit production systems from Eton, Gerber, Durkopp, INA, Investronica 528
Bobbin Show [1987]. work aids and attachment devices 560
Bobbin Show [1988]. emphasis on electronic linkage of sewing systems 8966
Bobbin Show/AAMA convention in Atlanta in September. computerized cutting systems 8601
Bobbin Show/AAMA Convention in Atlanta. introduction of EDI systems and new software 8799
British knitters enthusiastic over new machinery at ITMA, especially Stoll models 6694
Building with Geotextiles. geotextiles in filters and water engineering 302
CAD/CAM systems shown at JIAM [1987]. cutting and spreading systems 2277
carpet manufacturing equipment. ITMA [1987] showed various European innovations 2001
carpet market, [winter 1988] market at Western Merchandise Mart 1415
Chicago carpet market 2159
Cologne exhibition, Middle Eastern fabrics 3787
Cologne Fair, Children and Young People. [spring, summer 1988] fashions 2087
Cologne Show [June 1988]. apparel manufacturing machinery on display from Union Special 4554
Computers in Retailing Exhibition. changes in retailing concepts 4624
contemporary German, Finnish handicraft art in exhibition 4631
Contracting Sourcing Fair at [1987] Bobbin Show 544
Czechoslovakian knitting machinery. ITMA [1987] preview 252
de Young museum, San Francisco. shawls brought from Kashmir to Europe [1700-1870] displayed 2944
Designer Menswear Show [1988]. fashion trends. exhibit highlights 2890
Designer Menswear Show [1988]. trends 2842
Dreieichenhain narrow band weaving. history of Africa, Europe 4177
embroidery from Germany in late Middle Ages. priests' vestments in wool and linen 4610
English Textile Artists exhibition, Stuttgart. needlepoint 4632
EXSL [1987] Exhibition of Sports and Leisure. dancewear fashion trends 1366
Fabrex [1987]. price competition, marketing, design 1306
Fabrex. retro-trends in fabrics and leathers. bigger patterns. bright, cleaner colors 2646
Fashion Week Munich [1987]. women's wear [spring, summer 1988] styles 2139
fashions show of men's wear, women's wear, children's wear, sportswear, and lingerie 2876
fiber producer at [1988] Yarn Fair. prominent trends, products 7398
Fiber Producer Exhibition. Zellweger Uster's filament yarn tester 3C/ Automatic Digital Testing and Analysis Station 3819
Fifth German Biennial Exhibition of Textile Art, Krefeld. major exhibitions 4787
Frankfurt textile fairs. interview with Dr. Stauber 2346
G-Mex Textile and Technology exhibition in Manchester. highlights. post-ITMA developments 4744
G-Mex Textile and Technology exhibition. chemicals, equipment. dyeing, printing, finishing 4743
G-Mex Textile and Technology exhibition. post-ITMA developments in quality control and testing equipment 4648
Gaudi Hombre, ninth, in Spain. menswear designs and trends 2909
Gaudi Hombre, Spain's premier men's fashion show. disappoints viewers. declining market 2966
German Textile Art Group. [1988] exhibition. textiles to suggest sculptural forms 4626
HAKA [1988]. men's fashions 625
Harrogate Fashion Fair exhibits 623
Harrogate International Carpet Exhibition [1987] profiled 5439
Heimtex [1988]. carpet trends, tufting machines, stain blocking 4514
Heimtextil [1987]. Atmosphere home fabrics display 3801
Heimtextil [1988] exhibition. rich, opulent colors. decorative bedding and towel designs from various overseas manufacturers 2994
Heimtextil [1988] show emphasizes quality and design 2181
Heimtextil [1988]. fabric trends and exhibitors 1861
Heimtextil. innovations in machine technology and carpet design 2167
highlights. Acu-Fiber system, new Multiwebb material, and Fibrella fabric 358
Hong Kong fashion shows [fall/winter 1988] preview 3776
IAA International Motor Show highlights. nonwoven adhesives, automotive textiles, hot melts 356
ICO Graphics [1987]. computer aided design advantages 6359
Idealtalia [1988]. Italian fabric fair to be held in New York 3523
IFAI [1987] show highlights, industrial fabrics 1868
IMB and Bobbin Show. display of rapid development of apparel manufacture technology 8598
IMB Show. Bobbin Show. apparel equipment investment considerations 5539
IMB [1987]. preview of multi-head embroidery machines and accessories 6188
IMB [1988] at Cologne. overview of computer systems for design, manufacture and monitoring 7888
IMB [1988] in Cologne. machinery, computer aided design 8630
IMB [1988], pressing machinery. advances in programming, automation 6194
IMB [1988]. advances in sewing machinery 6199
IMB [1988]. American exhibitors at fair 6368
IMB [1988]. highlights 8587
IMB [1988]. Preview from Gerber Garment Technology. spreaders 2835
IMB. new sewing units. programmable. electronic control 6198
IMB. Rockwell-Rimoldi, Pfaff-Pegasus sewing machines for underwear 6991
INDEX [1987] exposition. innovations in nonwovens 6021
INDEX [1987] nonwovens. EDANA recognizes outstanding nonwovens manufacturers 2391
INDEX [1987]. highlights of papers read. fibers, bonding materials, fabric formation 357
INDEX [1987]. innovative nonwoven products 2392
INDEX [1987]. new products and market for nonwoven textiles 8967

INDEX [1987]. nonwoven bonded fabrics industry 362
INDEX [1987]. summaries of papers read. agriculture, hygiene, medical 3544
INDEX [1987]. summaries of papers. gas filtration, industrial clothing, roofing 3527
International Automobile Show in Frankfurt. nonwovens 6736
International Clothing Machine, IMB [1988]. machinery exhibits 6966
International Clothing Machinery Fair [1988]. CIM popular 6165
International Clothing Machinery Fair [1988]. faster, more efficient cutting machinery 4537
International Clothing Machinery Show [1988]. Gerber Garment Technology's improved cutting and spreading machinery 4536
International Design Group show. lines, purchases 2895
International Design Group show. trends [fall 1988] sportswear and apparel 2894
International Hosiery Exhibition [1988], Gaston County's Radial Flow Static Dyeing System on display 3614
International Hosiery Exhibition [1988], machinery and market outlook for next year 4223
International Hosiery Exhibition, automation developments 6589
International Hosiery Exhibition, hosiery equipment 6371
International Hosiery Exposition [1988]. higher speeds, computerization, electronics. advances for men's socks 4224
International Hosiery Exposition 6683
International Hosiery Show, products and machine trends 6767
International Textile Machinery Exhibition [1987]. automation and instrumentation 6629
International Western Apparel and Equipment show. dominant trends, merchandising strategies 1313
Interstoff apparel fair. fashions from fiber producers 3773
Interstoff fashion fabric apparel show. trends in fabrics, design, color 1368
Interstoff Trendtable. fashion trends [fall/winter 1988/1989] 1369
Interstoff [1987]. Trends Live show. fashion fabrics in apparel 2112
ISPO Sports Equipment Trade Fair. sportswear fashion trends 1367
ITMA [1967]. water jet looms. technical advances shown since [1967] ITMA 5885
ITMA [1987] automation advancements in loom designs 4185
ITMA [1987] carpet manufacturing machinery 1728
ITMA [1987] cost effective emissions control seen in dyeing and finishing equipment 4398
ITMA [1987] effect on British textile companies and [1988] spending plans 1480
ITMA [1987] effect on French textile companies. capital spending plans, investment programs 1483
ITMA [1987] exhibit highlights. air jets, water jets, rigid and flexible rapiers, projectiles, accessories 196
ITMA [1987] exhibit profile of featured machinery 4788
ITMA [1987] exhibition. innovations in auxiliary finishing equipment. guiding cloth and weft straighteners 7551
ITMA [1987] finishing equipment, computerization, process optimization 4399
ITMA [1987] highlights in wet processing. advanced technology 4393
ITMA [1987] highlights of yarn manufacturing equipment. spinning, winding, twisting 148
ITMA [1987] highlights. European and Italian textile industries 1532
ITMA [1987] highlights. rope dyeing and tubular fabrics. continuous and batch 3612
ITMA [1987] highlights. trends in industry progress 3148
ITMA [1987] laboratory equipment for finishing and dyeing. precision of control 4401
ITMA [1987] overview of recent innovations 4397
ITMA [1987] overview. spinning. rotor speeds. spindle drives 941
ITMA [1987] technology, limited effect on capital spending plans at Alabama, Georgia mills 1484
ITMA [1987] yarn processing exhibits reviewed 940
ITMA [1987], crochet machines from COMEZ 5042
ITMA [1987], developments. expansion of electronics 5915
ITMA [1987], electronic machinery for knitting industry on display 4242
ITMA [1987], false twist draw texturing machines exhibited 1715
ITMA [1987], knitting machinery developments 2598
ITMA [1987], nonwoven fabric technology 2616
ITMA [1987], nonwoven processing equipment reviewed 1874
ITMA [1987], robotics in carpet yarn spinning 2514
ITMA [1987], spinning innovations. mills in the year [2000]. trends 5774
ITMA [1987]. accessories and auxiliary equipment for knitting industry 3942
ITMA [1987]. accessories for looms. yarn tension and warp guiding systems 3432
ITMA [1987]. air engineering trends 1526
ITMA [1987]. air jet, wrap, friction, and rotor machinery displayed 4938
ITMA [1987]. air texturing and intermingling equipment 965
ITMA [1987]. APM, EMM, Wagatex flat knitting machines 7455
ITMA [1987]. automated processing 7935
ITMA [1987]. automation in dyehouses. increased production. decreased cost 7129
ITMA [1987]. automation of batch dyeing and printing machines 1948
ITMA [1987]. automation, dyeing machines for knit fabrics, and process controllers 3562
ITMA [1987]. auxiliary equipment, transport, testing systems 7178
ITMA [1987]. auxiliary weaving equipment 1757
ITMA [1987]. bobbin lace machines 8257
ITMA [1987]. CAD and CIM in weaving. possibilities and limitations 5864
ITMA [1987]. CAD-CIM in printing. Designmaster 9000 and Aloha systems 6856
ITMA [1987]. CAD-CIM in weaving. developments for jacquard and dobby 6647
ITMA [1987]. carpet machinery trends 6249 6250
ITMA [1987]. carpet weaving. trends 5862
ITMA [1987]. Cerifil worsted spinning frame 5782
ITMA [1987]. CIM in textile industry as distinct from CAD/CAM and PPS 7873
ITMA [1987]. circular and flat knitting machinery profiles 5068
ITMA [1987]. circular knitting machine technology. advances 1019
ITMA [1987]. circular knitting machines exhibited. survey 1035
ITMA [1987]. circular knitting systems. electronic patterning and guidance controls. automatic sock knitting 2606
ITMA [1987]. circular weft knitting machines 5069
ITMA [1987]. circular yardgoods. developments 1136
ITMA [1987]. CMS Selectanit automatic flat machines from Stoll 258
ITMA [1987]. color management systems 2735
ITMA [1987]. colorimetric devices. computer-aided, on-line optics 4688
ITMA [1987]. colors for textile machinery 6369
ITMA [1987]. Comez crochet machinery exhibitions. innovations 8283
ITMA [1987]. Comez crocheting machines and devices 235
ITMA [1987]. Comez crocheting machines. innovations shown 4231
ITMA [1987]. computer aided production control for woolen spinning systems 5752
ITMA [1987]. computer controls, electronics. circular sweater strip, flat beds, yardgoods, warp knits, auxiliary equipment 1774
ITMA [1987]. computer integrated manufacturing 2291
ITMA [1987]. computers, yarn packaging, dyehouse metering, and tenter productivity 4408
ITMA [1987]. consulting. Werner Associates International 6337
ITMA [1987]. continued report on textile machinery and equipment 6328
ITMA [1987]. continuous dyeing machinery 4447
ITMA [1987]. cotton knitting, stitch bonding, and crocheting machinery 2612
ITMA [1987]. cotton processing technology presented 1586
ITMA [1987]. cotton spinning highlights 942
ITMA [1987]. CR 620 and CX 860 jacquard looms. Staeubli 5876
ITMA [1987]. crocheting and knitting machinery product descriptions 5901

ITMA [1987]. cutting, sewing, linking, boarding machinery 8613
ITMA [1987]. Czech large gage circular and hosiery knitting machines 7442
ITMA [1987]. detailed survey 5593
ITMA [1987]. development of Stork's rotary screen coating. increased production 6153
ITMA [1987]. development trends in circular, warp knitting machinery 7449
ITMA [1987]. developments in dyeing, printing and finishing 381
ITMA [1987]. developments in electronics for jacquard weaving. Brochier TLIF 7409
ITMA [1987]. developments in larger, quieter mechanisms for flat knitting systems 2607
ITMA [1987]. developments in machinery for crocheting. CAD/CAM 6676
ITMA [1987]. developments in machines for flat knit goods and hosiery 6707
ITMA [1987]. developments in post spinning operations. computer innovation 6627
ITMA [1987]. developments in preparation and finishing systems 1971
ITMA [1987]. developments in ring spinning machinery 4954
ITMA [1987]. developments in synthetic air textured yarn, intermingling 4962
ITMA [1987]. directory of exhibitors 2307
ITMA [1987]. display of knitting and hosiery machines 5940
ITMA [1987]. double twisting, twist texturing, and fixing 4948
ITMA [1987]. dyeing and dispensing systems 3659
ITMA [1987]. dyeing and finishing equipment. trends, machinery 1897
ITMA [1987]. dyeing and finishing machinery displayed 1238
ITMA [1987]. dyeing and finishing machinery reviewed 1901
ITMA [1987]. dyeing and printing machinery. trend to smaller lots. CAD 6920
ITMA [1987]. dyeing machinery, continuous 6892
ITMA [1987]. dyeing machinery. importance of automation, computer control 3611
ITMA [1987]. dyeing, exhaust method. machinery 8506
ITMA [1987]. dyeing, finishing, and printing machinery. computers and automation 3557
ITMA [1987]. dyeing, printing and finishing machinery innovations 3637
ITMA [1987]. dyeing, vacuum dyeing, finishing, and printing machinery 2314
ITMA [1987]. effect on North Carolina and Virginia mills. capital spending plans 1534
ITMA [1987]. effect on South Carolina mills. capital spending plans 1535
ITMA [1987]. effect on United States textile industry 3943
ITMA [1987]. electronic applications in hosiery machinery reviewed 1024
ITMA [1987]. electronic jacquard looms featured. electromagnetic patterning elements 3450
ITMA [1987]. electronic jacquard selection by OSG/Sandonini for large diameter circular machines 7446
ITMA [1987]. electronic machinery for nonwoven manufacture 8380
ITMA [1987]. electronics enhancing dyeing, weaving, knitting, yarn production, design 4723
ITMA [1987]. electronics in spinning and weaving 8830
ITMA [1987]. embroidery machine highlights 2029
ITMA [1987]. embroidery machinery. CAD/CAM and broad width machines 6677
ITMA [1987]. equipment and processes for dyeing and finishing 3559
ITMA [1987]. equipment for drying, padding, washing, and tentering 5171
ITMA [1987]. exhaust, jet, and continuous dyeing machinery 2757
ITMA [1987]. exhibition of Mayer & Cie MCPE machine for chenille with a patented preforming technique 8332
ITMA [1987]. exhibitors in weaving and control apparatus 6420
ITMA [1987]. false twist and air jet texturing machines 8200
ITMA [1987]. fiber processing trends 803
ITMA [1987]. final fabric treatments shown 8537
ITMA [1987]. finishing and dyeing equipment 2711
ITMA [1987]. finishing equipment and accessories exhibited 7557
ITMA [1987]. finishing equipment, flexibility in production plants 2710
ITMA [1987]. finishing machinery for knitgoods 5180
ITMA [1987]. firm by firm guide to textile machinery innovations 1552
ITMA [1987]. first impressions of editors from Textile Horizons 1466
ITMA [1987]. flat bed knitting machines from eight Italian firms 7456
ITMA [1987]. flat knitting machine highlights 1786
ITMA [1987]. flat knitting machinery design innovations 1037
ITMA [1987]. flat knitting machinery. overview of innovations 6681
ITMA [1987]. flat knitting machinery 1789
ITMA [1987]. flexibility of production machinery. substitution of automated linkages 3116
ITMA [1987]. Flexnip for carpets from Kuesters 5189
ITMA [1987]. French textile weavers' impressions of machinery. recent purchases 2590
ITMA [1987]. full fashioned machines 5081
ITMA [1987]. full fashioned straight bar machine models by Scheller 1038
ITMA [1987]. future technological activity 5167
ITMA [1987]. garment assembly machine manufacturers 2309
ITMA [1987]. general review of machinery and manufacturers 1523
ITMA [1987]. general review 1467
ITMA [1987]. German manufacturers' success in integrating process control 3556
ITMA [1987]. Gilbos exhibition catalog 5858
ITMA [1987]. Grilon EMS separation polyamide yarns 181
ITMA [1987]. highlights of control and monitoring systems 730
ITMA [1987]. highlights of Mayer warp knitting machines 2609
ITMA [1987]. highlights of specialized knitting machinery 3470
ITMA [1987]. highlights. spinning. weaving. knitting 2306
ITMA [1987]. hosiery knitting machinery 7428
ITMA [1987]. hosiery machinery 5045
ITMA [1987]. hosiery machines. processing versatility 3459
ITMA [1987]. important displays 7250
ITMA [1987]. innovation in texturing machinery. emphasis on automation 6604
ITMA [1987]. innovation in the field of garment dyeing knitwear. automation 6847
ITMA [1987]. innovations for dry spinning of flax 7373
ITMA [1987]. innovations in finishing. higher sophistication, increased cost 6082
ITMA [1987]. innovations in knitting technology 3471
ITMA [1987]. innovations in specialized knitting machines. materials and products 6679
ITMA [1987]. innovations in the mercerization of tubular knits 6833
ITMA [1987]. innovations in wet processing machinery. application of process control 6821
ITMA [1987]. introduction of Picanol system for weft repair of GTM machines 7422
ITMA [1987]. introduction of Tatsumi's T-4CR flat jacquard machine 8320
ITMA [1987]. introduction of the Create Design EX by Ernst Benz for textiles 7875
ITMA [1987]. introduction of the Superba PEL automatic ball winder 8829
ITMA [1987]. Japanese developments in spinning and weaving 8840
ITMA [1987]. Japanese glove knitting machine makers, exhibits 5066
ITMA [1987]. jet looms. four color air jet. six color machines debut 3438
ITMA [1987]. jigs 5244
ITMA [1987]. Jumberca Links-Links technology. overview of machine evolution 8285
ITMA [1987]. Jumberca's eight circular knitting machine models 7443
ITMA [1987]. knitted goods. piece goods, outerwear, hosiery. developments in production (part two) 7425

ITMA [1987]. knitting auxiliary equipment and accessories 5941
ITMA [1987]. knitting auxiliary equipment 1776
ITMA [1987]. knitting exhibits, electronics applications. various companies 1783
ITMA [1987]. knitting industry. developments for machinery and techniques 7437
ITMA [1987]. knitting machine accessories and sock knitting machines 3469
ITMA [1987]. knitting machine product reports 5927
ITMA [1987]. knitting machine technology. advances 1016
ITMA [1987]. knitting machinery and accessory exhibitions 7452
ITMA [1987]. knitting machinery and pattern programming systems from Dubied 246
ITMA [1987]. knitting machinery by Orizio, exhibits 248
ITMA [1987]. knitting machinery exhibit highlights 1031
ITMA [1987]. knitting machinery trends and developments. computer graphics 1033
ITMA [1987]. knitting machinery, small diameter circular, for legwear, knitting patterns 3466
ITMA [1987]. knitting machinery. developments by Liba and Karl Mayer 6678
ITMA [1987]. knitting machinery. developments shown in field of electronics 6680
ITMA [1987]. large diameter circular knitting machines 1775
ITMA [1987]. laser engravers, automated dye kitchens 2777
ITMA [1987]. Liba, Karl Mayer warp knitting machines, sectional warpers 7459
ITMA [1987]. linking spinning machinery to improve productivity 3324
ITMA [1987]. loom accessories 5022
ITMA [1987]. loom technology advances 999
ITMA [1987]. looms and accessories 5887
ITMA [1987]. looms exhibited 2571
ITMA [1987]. looms 1759 5889
ITMA [1987]. machinery and techniques for knitted piece goods, hosiery and outerwear 7426
ITMA [1987]. machinery for coating and printing carpets 4392
ITMA [1987]. machinery for synthetic fiber and yarn production 3270
ITMA [1987]. machinery highlights 2237
ITMA [1987]. machinery review, developments 1531
ITMA [1987]. machines by Autefa 3186
ITMA [1987]. machines for pretreatment and dyeing. quality improvement and automation 6921
ITMA [1987]. major Swiss manufacturers interviewed 7249
ITMA [1987]. manmade fiber production and processing 887
ITMA [1987]. manmade fiber production equipment highlights 802
ITMA [1987]. manmade fibers. production. integrated textile operations 6501
ITMA [1987]. materials handling and integrated flow technology make production quicker 4796
ITMA [1987]. Mayer and Cie circular knitting machinery. Relanit system, jacquard plush, jacquard/transfer, underwear models 2604
ITMA [1987]. Mayer Coner link system. bobbins 5788
ITMA [1987]. mechanical and electronic shedding motions, dobbies, and jacquards 5021
ITMA [1987]. mechanical finishing machinery. consolidation and control instead of innovation 3673
ITMA [1987]. medical textiles sector. highlights 2549
ITMA [1987]. Memminger innovations in knitting machinery 247
ITMA [1987]. Monarch, Pai Lung, Tritex circular knitting machines, IRO and Memminger yarn tension units 7445
ITMA [1987]. narrow fabric looms. trend toward shuttleless mechanisms 5019
ITMA [1987]. narrow fabric looms 8266
ITMA [1987]. new automatic warp knitting machines with control units for patterning, machine functions 5945
ITMA [1987]. new machines and improvements 1015
ITMA [1987]. new techniques for filament yarns. gains in quality 6602
ITMA [1987]. new techniques. collaboration in industry 6050
ITMA [1987]. nonwoven development trends 5970
ITMA [1987]. nonwoven fabric manufacture 3496
ITMA [1987]. nonwoven fabrics machinery 5145
ITMA [1987]. nonwoven fabrics. making-up. machinery trends 6193
ITMA [1987]. nonwovens manufacturing and processing equipment 1154
ITMA [1987]. nonwovens manufacturing lines by Asselin 742
ITMA [1987]. nonwovens, new machinery. developments in fine and isotropic fiber webs 6720
ITMA [1987]. novelty production 5962
ITMA [1987]. offerings in worsted spinning machinery, yarn preparation 3323
ITMA [1987]. Omaega's new electronic and Video-jacquard machines 8314
ITMA [1987]. opening and carding machinery 1693
ITMA [1987]. OSG small and medium diameter circular knitting machinery 257
ITMA [1987]. overall trends 2236
ITMA [1987]. Picanol GTM loom. PSO system for automatic repair of weft stops 4183
ITMA [1987]. pneumatic systems, air conditioning and cleaning 8832
ITMA [1987]. post show reactions from successful exhibitors 1553
ITMA [1987]. preparatory dyeing processes. innovation in a neglected field 6831
ITMA [1987]. pretreatment systems 4409
ITMA [1987]. preview of Jumberca circular knitting machinery 253
ITMA [1987]. preview. technical information 7898
ITMA [1987]. printing developments 2772
ITMA [1987]. printing exhibits and new developments. use of lasers 5281
ITMA [1987]. process control systems 5532
ITMA [1987]. proposals in the sector of instrumental colorimetry 6852
ITMA [1987]. Protti flat knitting machinery preview 260
ITMA [1987]. Protti P94 rectilinear machine with four drops 7457
ITMA [1987]. Protti's line of flat knitting machinery 259 8315
ITMA [1987]. raising, shrinking, shearing, steaming, pressing, and inspection 5170
ITMA [1987]. ready made goods finishing 6107
ITMA [1987]. review (part 2) 2305
ITMA [1987]. review of loom developments by various manufacturers 1006
ITMA [1987]. revolutionary, unproven productivity advances assessed at VDF/VTCC and Gesamttextil meetings 7966
ITMA [1987]. Rieter and Schubert & Salzer looms 2572
ITMA [1987]. Rimach J290F full fashioned knitting machine 262
ITMA [1987]. ring spinning machinery developments reviewed 955
ITMA [1987]. Rockwell Rimoldi sewing machinery 7693
ITMA [1987]. Rumi Filli knitting machinery, hosiery machinery 249
ITMA [1987]. Serracant's tow dyeing, steaming, and milling/scouring units 6094
ITMA [1987]. shed formation highlights 1760
ITMA [1987]. short staple spinning machinery. refinements in transport systems, automatic doffing 3359
ITMA [1987]. short staple spinning machinery 5789
ITMA [1987]. singeing, scouring, bleaching, and mercerizing machinery 1909
ITMA [1987]. Sirio 4000 four-system automatic flat knitting machine from EMM 261
ITMA [1987]. SiroSpun short staple spinning from Zinser 5785 5792
ITMA [1987]. sizing developments 1735
ITMA [1987]. small diameter circular knitting machines 1777
ITMA [1987]. South Carolina mill executives discuss looms displayed 2593
ITMA [1987]. specialized knitting systems featured 3455
ITMA [1987]. specialty products with structured needles 6794
ITMA [1987]. spectrophotometry for controlling and analyzing the color of all end products 1949
ITMA [1987]. Spindel Fabrik Suessen's PlyFil spin-assembly-winder machines exhibited 130

ITMA [1987]. spinning machinery 2495 5750 5765
ITMA [1987]. spinning microelectronics and transport automation 8187
ITMA [1987]. spinning technologies 2515
ITMA [1987]. spinning, monitoring. new systems 6581
ITMA [1987]. spinning. new machinery for winding and twisting. automation 6579
ITMA [1987]. staple fiber spinning and regeneration machinery 953
ITMA [1987]. Steiger knitting machinery and TGS pattern programming system 251
ITMA [1987]. stocking knitting machinery. exhibits by Italian firms 8286 8290
ITMA [1987]. Stoll CMS Selectanit machines. computer controlled. new generation 8318
ITMA [1987]. Sulzer Rueti ring spinning, a practical guide from The Textile Institute 997
ITMA [1987]. Sulzer Rueti's new and upgraded looms 3431
ITMA [1987]. Sulzer Rueti's new projectile, air jet and gripper looms 2573
ITMA [1987]. survey of exhibits and manufacturers 4797
ITMA [1987]. sweater-strip and circular yardgoods machines presented 1017
ITMA [1987]. Swiss textile machinery. latest developments 5537
ITMA [1987]. systems for CAD in knitwear industry 3131
ITMA [1987]. technical evolution of water jet looms, future prospects 5884
ITMA [1987]. technological advances and reality of automated yarn manufacturing plant 2496
ITMA [1987]. technological advances. warp preparation, electronics, robotics, automation, speed, new materials 5023
ITMA [1987]. technological developments in yarn preparation machinery for cotton and wool spinners 2506
ITMA [1987]. textile machinery. French manufacturers. developments 3550
ITMA [1987]. textile machinery. Swiss manufacturers. developments 3402
ITMA [1987]. textile testing and laboratory equipment 2310
ITMA [1987]. textile testing machinery. data gathering 5459
ITMA [1987]. textile testing trends. raw materials, linear textiles, textile fabrics 1436
ITMA [1987]. Textile World's special report 2389
ITMA [1987]. Textile World's survey of important new products introduced 2304
ITMA [1987]. texturing machinery, false twist and air 4960
ITMA [1987]. texturing machines, trend analysis 2530
ITMA [1987]. texturing trends 963
ITMA [1987]. thermal treatments. quality and flexibility 6079
ITMA [1987]. trends and developments in dyeing fabric. need for skilled engineers 6922
ITMA [1987]. trends in CAD-CIM in textile printing. requirements system 6132
ITMA [1987]. trends in filament yarn processing, novelty yarns 5801
ITMA [1987]. trends in finishing sector. automation, CAM 7556
ITMA [1987]. trends in knitting machinery. flat, warp, full fashioned 3465
ITMA [1987]. trends in long staple spinning machinery 5764
ITMA [1987]. trends in looms 8258
ITMA [1987]. trends. spinning and weaving highlights 1522
ITMA [1987]. tubular knitgoods dyeing and drying machinery 6130
ITMA [1987]. tufting machinery. automation, computerization, consolidation of processes 4298
ITMA [1987]. tufting machines for wide fitted carpet fabrics 1815
ITMA [1987]. twisting developments 958
ITMA [1987]. twisting machinery renovated by computerization 4127
ITMA [1987]. unconventional spinning 954 3366
ITMA [1987]. warp formation and preparation. sectional and fraction warpers 7410
ITMA [1987]. warp knitting machinery from Liba 2610
ITMA [1987]. warp knitting machinery from Textima 2611
ITMA [1987]. warp knitting machinery 1039 1790 5085
ITMA [1987]. warp knitting, tricot, raschel, crochet machines 5084
ITMA [1987]. warp preparation. most machines equipped with microprocessors 1736
ITMA [1987]. warp preparation 1737 5001
ITMA [1987]. warping, sizing, and warp preparatory processing machinery 6828
ITMA [1987]. washing, shrinking equipment for knit fabrics 7562
ITMA [1987]. weaving and knitting technology trends 1730
ITMA [1987]. weaving preparation and loom trends and developments 3448
ITMA [1987]. weaving preparation, developments 5868
ITMA [1987]. weaving preparation. machinery. electronic control 6636
ITMA [1987]. weaving preparation 5856
ITMA [1987]. weaving rapier exhibitors. developments and advances 5010
ITMA [1987]. weaving systems. multiaxial warp knitting and raschel machines. Liba and Karl Mayer 5966
ITMA [1987]. weaving techniques. electronic control 5869
ITMA [1987]. weaving technology refinements, microelectronics and computers 2574
ITMA [1987]. weaving. machines for narrow fabrics and advantages of computerization 6649
ITMA [1987]. wet and dry finishing equipment 2713
ITMA [1987]. wet processing equipment. computerized process control and management information systems 7565
ITMA [1987]. wet processing machinery 1178 1237
ITMA [1987]. winding and twisting short staple yarns 4924
ITMA [1987]. winding machinery 993 5838
ITMA [1987]. wool printing machinery 8496
ITMA [1987]. woolen carding. terry looms, sample of more innovative exhibits 3187
ITMA [1987]. yard goods finishing. problems, solutions 6086
ITMA [1987]. yarn dyeing and drying machinery 8501
ITMA [1987]. yarn production equipment. spinning, winding, drawing, carding 107
ITMA [1987]. yarn texturing technology featured 3384
ITMA [1991]. likely developments 1473
ITMA [1991]. texturing machinery and products. prospective developments 7387
ITMA, ATME, general review 2390
ITMA. growth since [1951] inception 2308
ITMA. what investors want from manufacturers 7264
JIAM [1987] in Osaka. shirt finishing machinery. garment assembly technology 2393
JIAM [1987] textile industrial and apparel machinery exhibition in Osaka 2394
JIAM [1987]. apparel make-up machinery 525
JIAM [1987]. apparel manufacturing machines and accessories 3704
JIAM [1987]. auxiliary equipment highlights and trends 7899
JIAM [1987]. Avix Laser Cutting System, Seiko Sewing, Auto Pocket Welter. Satoh Seiko, Consew International 1292
Juki America's Quick Response sewing system unveiled at Bobbin Show. components 6989
Jumberca introduces new knitting machines at Westbury, New York open house 5926
Karl Mayer. new warp and raschel machines. new automatic bobbiners 6648
Kasuri prints in Frankfurt. Japanese style ikat weaving 3786
Laundry and Cleaning [1988] exhibitions. feeding, folding, finishing units 6200
Laundry and Cleaning [1988], new equipment for large laundry operations 6216
Laundry and Cleaning [1988]. textile care industry exhibition. continuous batch and dual solvent machines 6202
Laundry and Drycleaning [1988] exhibition. new drycleaning equipment with various solvent systems 6203
Leipzig Autumn Fair [1987]. knitting machinery 1032
Leipzig Autumn Fair [1987]. Textima exhibits 1524
lightweight sweater yarns displayed at [1988] Yarn Fair 7400
Linen and Domestics' Market. purchases, consumer demand for natural fibers 649

MAB International Menswear Fair. fashion trends 4612
marionette museum in Luebeck, West Germany. Burmese puppet drama program 3790
Mikawa, Japanese cotton fabric producer. Tokyo, Gamagori, Hong Kong and other fabric exhibitions 4990
Milanovendemoda Uoma Exhibition [1988]. fashion highlights 3758
MITEST. Second in November. reflexions on ITMA [1987]. spinning and weaving 6620
Mode-Woche Muenchen [1987], Fashion Week Munich. apparel show's success analyzed 2132
Monsanto's CyFana acrylic sweater yarn at Yarn Fair. other products, market expectations 6492
Montreal Pret and Collections International. vendor and buyer reaction 2934
Museum Schloss Rheydt. Anni Waywod's ten years of student's works 4636
NAMSB show. men's outerwear, prominent trends 2915
NAMSB [January 1988]. retailers and exhibitors discuss evolution. popular buys 2100
NAMSB, men's tailored clothing manufacturers. prominent styles and fabrics 2927
NAMSB, young men's resources. emphasis on jackets 2928
NAMSB. buying strategies from young men's retailers, purchases 2990
NAMSB. shirt and neckwear styles which retailers hope will spark furnishings sales 2916
NESA convention, total illuminated awning service packages and other products 6036
New Technology for the Apparel Industry (21st) exhibition in East Germany 3989
New York Fabric Show, dominant trends [spring 1988] 6027
New York Fabric Show. [fall/winter 1988/1989] fabrics 1094
New York Gourmet Show. independent table linen manufacturers exhibits. products and price points 2193
New York PReT fashion show, eleventh. general trend, designs from Theresa McAllen and Katlean de Monchy 2939
Oriental Rug Show at the Atlanta Market. alphabetical listing of exhibitors and their products 2175
Paris Tex'Styles, home fashions. sheers, stains, textured towels and tribute to designer Bordier 3016
People's Republic of China, textile history and current goals 6424
Pitti Bimbo, Moda Bimbo shows. teen-agers, children, babies 624
Pitti Filati [1987]. trends in color, fibers, yarns, fabrics, styles, shapes, accessories 1371
Pitti Filati [1988], spring/summer, reasons behind poor attendance and sales. product trends 1723
Pitti Lingerie show. tights and stockings 627
Pitti Lingerie, innerwear products. major trends and fabrics for women's daywear and bedtime fashions 2103
Pitti Uomo Italia [1987], designs and fabrics. Italian designers. show theme, styles 2094
Pitti Uomo Italia [1987]. conservative and avante garde fashions 3760
Pitti Uomo Italia [1987]. menswear trends [spring/summer 1988] 606
Portuguese Offer, twenty-first fabric fair, products from major manufacturers 4985
Portuguese Offer. fabrics and fashion trends 5577
Premiere Vision Fabric Fair. [fall/winter 1988/1989] trends and directions 318
Premiere Vision fabric show, worsted and linen fabrics. trends 2698
Premiere Vision show, bright, vivid cotton fabrics prominent 2652
Pret-a-Porter [1987] show. [spring, summer 1988] fashions reviewed 2143
prevention of sewing damage in apparel offered at SEAMS show 4553
Private Label Manufacturers Association trade show. nonwovens products shown 2617
quilted bedcovers exhibition at the Wadsworth Atheneum in Hartford. [1700-1987] represented 2999
Rimoldi's special exhibition displays machinery in Milan 3728
Salone del Mobile furniture exhibit. ratchet applications, multifunctional seating, slip covers 2182
Scan-Tech [1987]. Quick Response review in apparel industry 4517
SEAMS show [1988]. prevention of sewing damage to apparel. lubricant, fabric softener 4553
second generation electronic sewing machines from Union Special, Mitsubishi, and Investronica on display in Lille 2850
SEHM men's wear trends, designs 2905
SEHM. men's apparel show in Paris. United States buying 2901
sewing machinery manufactured by Rockwell-Rimoldi 8646
Ski Industries America Show, 34th Annual. [fall 1988] skiwear fashions 3781
Ski Industry America Show, retail buying 3780
SourceAmerica and Yarn Fair [1988]. trade show for knit apparel and textile industry 7397
spinning. ITMA [1987]. trends, innovations 5757
spunbonded and meltblown fabrics, dispersion technology 438
Steiger's Electra line of flat knitting machines at [1987] ITMA 6709
Super Show for men's activewear manufacturers. crosstraining collections, stretch items, warm-up suits, color, cotton 2900
TAFE [1987] in New York. highlights 2030
technical advances displayed at [1987] ITMA 6637
Technical Exhibition--Building with Geotextiles. highlights of papers 328
Techtextil Trade Fair, Frankfurt, technical fabrics, fibers 6421
Techtextil [1987]. observations 6417
Techtextil. knitted industrial textiles. gaps in information 267
Textile and Technology Exhibition, Manchester, February [1988]. preview 1589
Textile and Technology Exhibition. Manchester, England 4789
Textile and Technology Exhibition. nonwovens manufacture 8381
third Software Market organized by IBM. software available for IBM systems 7885
Thirteenth Biennial Tapestry Exhibition, Lausanne. prominent theme, artists, cotton popular 4790
Trier Museum, Rautenstrauch tapestry collection 3788
Trimmings, Accessories and Fabrics Expo [1988] 8588
United States knitwear producers fight imports with SourceAmerica trade show 6693
University of Bielefeld quilting art exhibition. twenty-six West German artists 3982
Uomo Moda [fall/winter 1987/1988]. sportswear for men 1326
weft break repair on air jet looms at [1987] ITMA 6671
Yarn Fair [1988] and SOURCEAmerica, yarn and knitwear exhibitions 6616
Yarn Fair [1988], interest in natural, manmade fibers, dyeing techniques, dyeing services 8206
Yarn Fair/SOURCEAmerica [1988]. blends becoming more popular. discussion of current and future market 8229

EXLAN IS AN ACRYLIC FIBER.

EXPORTS, SEE LEGISLATION, TEXTILE INDUSTRY, AND UNDER SPECIFIC BRANCHES OF INDUSTRY, SUCH AS APPAREL INDUSTRY.

EXTRUSION, SEE MANMADE FIBER EXTRUSION AND UNDER SPECIFIC FIBERS.

FABELTA IS AN ACRYLIC FIBER.

FABRIC CONSTRUCTION, SEE FABRIC DESIGN, FABRIC GEOMETRY, FABRIC QUALITY.

FABRIC DEFECTS (SEE ALSO OTHER HEADINGS, SUCH AS CONSUMER ATTITUDES, DETERIORATION OF MATERIALS, DISCOLORATION, FABRIC QUALITY, IDENTIFICATION, INSPECTION, NEPS, PILLING, STAINS, UNIFORMITY)
apparel assembly process. testing programs for cost effective production 3829
automatic fabric inspection system. Camera System LC 900 from Erwin Sick 1090

ball bearings on two beam looms, reduced tension unevenness, vibration, defects 4193
Caltronic fault log inspection system from IRO-Calator 5115
circular knit fabric stripes. study aimed at reducing incidence of defects 1780
cotton fabric preparation. faults in finishing 8235
damage due to acid of natural fibers and rayon 2861
deformation of cotton single jersey knits. causes and solutions 5967
discharge printing. fading and discoloration 464
dye streakiness. causes from fabric, processes and machines 8479
Erwin Sick Optik LC900 system for automatic fabric inspection 6022
fabric defects in finishing. troubleshooting 1970
filament yarn fabrics. causes 1841
fraying in fabric edges, causes and prevention 3522
inspecting, scoring, identifying, and flagging 3080
inspection machine, Knitscanner by Novakust. knitted piece goods 6192
inspection of knit fabrics. Novakust Knitscanner 7430
Knitscanner from Novakust. inspect knit fabrics in any structure, form, or size 6689
loop distortion. review of work published. fundamental physical parameters influencing loop distortion 4234
Mahlo's Orthomat RFMC-9 straightener unit with FMC-9 scanning system 5324
MW knit fabric inspection unit manufactured by Erwin Sick for circular knitting machines 8287
Original Hanau Fluotest lamp for UV-inspection of fabrics 3834
pattern recognition system. Fourier analysis for streakiness 5464
photo-yellowing of resin finished silk fabrics, reduction 1960
pilling. causes and how to avoid 6802
selvage floats. origins in warp handling and weaving technique 8255
SICK Automatic Surface Inspection System for flat weave fabrics 1088
SICK Scan System for woven fabric inspection 1089
spirality in single jersey fabrics 6749
spirality of wale lines in plain knitted fabrics. cause. solutions 5907
spirality problem in knit fabrics caused by twist liveliness and other factors 6789
starting bar defects, analysis 8709
stripes in taffeta raschel knit fabrics. machine stops and starts 1782
TALC. voluntary standard for flagging fabric defects 5478
textile product damage and hidden defects, improper care labeling 3799
textured polyester fabrics. defects caused during wet processing 6163
tight warp and weft in polyester and wool blend worsted fabrics. causes 6750
transply cracking. crack density detection with acousto-ultrasonic method 7507
Unilux Strobe light. improvement of visual fabric inspection 8821
Vollenweider's Super Duplo Scantex cloth cleaning and shearing machine with automatic inspection 4414
weft defects, modification of loom take-up mechanism to prevent 8259
Worth Street Rules. interpretation and application of defect point count levels 3081
woven fabrics. stitches. effect of heddle position 1771

FABRIC DESIGN (SEE ALSO OTHER HEADINGS, SUCH AS FABRIC GEOMETRY, FABRICS)

awning graphics, how computer aided design can help in preparation 4717
CAD principles for dobby fabric weave 2588
CAD software needed for woven textile designs 8797
CAD-CAM at NCSU. industrial consortium 3129
carpet design. Pattern Management System. Vertical Technologies 5865
chinoiserie in European textiles and costumes 521
composite fabrics for protective clothing 8644
composites, carded glass. design, structure, and properties 5959
composites, nonwovens as reinforcement media. fluid flow 6013
computer aided design system Jacquard-1, applications 5028
computer aided design system, Tweed. Nino and IAM 5902
computer aided design system. DESIGN-3 8256
computer aided design 6354
computer applications and its contribution to Quick Response technology 2283
computer-aided design system evaluated 7884
Cotton True Performance Textile Designers Awards sponsored by Cotton Incorporated 6751
decorative fabrics, documentary prints for popularity due to historical restoration, antique and reproduction furniture 3022
double sinker knitting, CAD program 5052
EAT DesignScope textile CAD system 3403
EAT Patro System for jacquard and warp knits 4206
engineering principles applied to design of suiting fabrics 1365
Feels. woven fabric for home furnishings developed by Joseph Newsome 7521
formula for jacquard hosiery generates data for elasticity and yarn consumption 5054
formula for warp knit fabric development from filament yarns 6691
geotextile vertical drains as replacements for conventional sand drains. design parameters 7774
Gerber Garment Technologies' design system 4535
Herforder Teppichfabrik's tufted carpet design competition and results 3785
interactive design of geotextile fabrics according to application requirements 7531
international reports. Enka workshop, Comomoda collections, Hom men's fabrics, denim 2647
Jac-CAD 2000 from Grosse. design studio system for jacquard knitting and weaving 7141
jacquard design and problems with drycleaning 4572
jacquard fabrics. pattern information sampling 303
jacquard knits produced on the KSC-E machine by Nagata 5908
jacquard. Jac-Art 2000 color graphics drafting system for fabric design 7142
jacquard. overview of design techniques. need for simple manufacture of knits 8288
Jumberca's Model DJE-2 double jersey machine 4252
karakul wool in manufacture of tweed fabrics 4991
knit jacquard designs by Ecafil. trend toward Middle Eastern motifs 8292
knit pattern possibilities on jacquard transfer machines 7431
knits. versatility and definitive techniques 6682
Lectra automatic pattern scanning system 3120
M&S International design. Personal IGOS M&S CAD/CAM System for weaving and printing and carpet manufacture 8231
M-repeat patterning system for circular knitters 4235
matching plaid fabrics without pinning or basting 4526
Metap fabric and computerized design, program based on surface density 5096
microcomputer to interactively control fabric while woven. storing weaving, design information 3451
Patronik 2000 pattern preparation system from Sulzer Morat for circular knitting machines 6700
pattern development illustrations with Mayer textile machinery 3456
pattern preparation unit from Stoll, new features 1091
pattern preparation unit, Stoll VDU Selectanit 8289
patterning. interactive constructions of weave and color with microcomputers 8254
pile fabric. visual and tactual sense values, effect on design 7082
plaid fabrics in apparel manufacture 4525
plaid. cutting on the straight grain 4527
proper warping, weft preparation, shuttleless weaving for open end yarns, fabric quality standards 4171
raschel knit curtains. technology, finer synthetic yarns allow more designs 4259
relationship of fabric characteristics and clothing construction. textile course at Iowa State University 4795
screen printing. stages of process from design to production 8442

sheets, Albert Sardelli of Wamsutta Pacific, director of creative services. interview 3025
Shima SDS 480 graphic system. allows display of 900 recorded designs 8804
sinker, latch needle system for circular knitter, design 6705
Soviet mills. knit fabrics and apparel, fibers, designs 595
Soviet weaving mill fabrics composed of manmade silk filament yarns 5156
space suits, shuttle. study for the home economist 2880
tubular bandage knitted to provide more or less support as needed 1856
Unika Vaev profiled. fabrics for office furnishings 1428
upholstery fabric predictions [1988] from United States mills 1426
Viascan system for producing and processing color patterns for jacquard weaving. Viable Systems 8252
visual cover, effect of fiber variables 6069
weatherproof activewear. Zefsport nylon fabric reinforced with Gore-Tex laminate 2648
wool fabrics with background weave and foreground design, new weft insertion system 5035
woven fabric patterns based on complementary angles 3525
woven fabric planning and CAD/CAM. new economics of design 3428

FABRIC GEOMETRY (SEE ALSO OTHER HEADINGS, SUCH AS FIBER-YARN-FABRIC RELATIONSHIPS)
abrasion resistance of viscose linings improved with different weaves, N-methylol finishing 8359
circular knit fabrics, spun and filament yarns. properties of integrated knits 2649
composites compared for flexural and tensile strengths 8370
composites, carded glass. design, structure, and properties 5959
composites, nonwovens as reinforcement media. fluid flow 6013
compression in nonwoven insulating fabrics as a function of effectiveness 6752
compression resistance, relation of knitting method to strength 6788
crease recovery and durable press rating relationship to fabrics of different constructions 3521
deformation estimated through CAD system program 7074
deformation of fabric estimated with two dimensional problem 7073
dimensional stability in mercerization with the Dimensa by Benninger 8459
directionally structured filament fabrics used for geotextiles 1128
fluid spreading in web structures 4675
fluid transport performance in low density absorbent structures 4676
formula for warp knit fabric development from filament yarns 6691
geotextile filtration fabric structures in drainage applications compared 6781
geotextiles for roadbed reinforcement. influence of fabric type, placement, and anchoring 7782
graphite and polyetheretherketone composite thermoplastic systems in three dimensional weave geometry 981
helical model of the plain stitch, relation to fabric thickness 1778
K values of knitted fabrics. dimensional stability 2218
knit-de-knit yarns. features. crepe effect on knit fabrics 2545
knits, single faced cotton. dimensional stability 5906
men's suiting fabric. seam slippage. effect of fabric structure and mechanical properties 8609
mercerization with the Dimensa by Benninger. offers dimensional stability 8458
moisture-induced changes in fabric structure 2662
needled fabric manufacture. effect on fabric properties 3498
needlepunched outdoor materials. structure effects on thermal properties 7545
pile construction, fiber denier and their relation to carpet durability 6645
plain loops of rotor spun cotton yarns. geometry and dimensional properties 2682
polynosic fabrics and blends, shape retention 7513
rotor spun cotton yarns. area and linear properties relative to dimension 3538
shear strength of geotextile/soil interface 7534
single jersey loop pile fabrics produced from cotton pile. dimensional properties 1170
single jersey loop pile fabrics. linear and area dimensional properties 1171
staining techniques for structure visualization 6282
structure characteristics of triaxial fabrics. tear, rupture, bursting, elongation 314
thermal transmittance and air permeability of fabrics and fabric assemblies 6278
trials for determining granular soil structures and models of geotextile behavior 2679
water repellency studied on ribbed surface structure of fabrics 6806
weave type determined by digital image processing 2701
web geometry, anisotropic. modeling 6020
wet-in-wet processing. impact of structure 1179

FABRIC HANDLING EQUIPMENT (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL MANUFACTURE, FINISHING MACHINERY, AND UNDER SPECIFIC PROCESSES SUCH AS PACKAGING)
beams. Sulzer component for computer integrated weaving 8251
BSM optimizer by Calator. tensionless handling of weft knits for final inspection 1455
Bullmerwerk. folding and cutting machines 5380
Compactlifter transporter from Contex 4736
conveyors, analysis of systems available from United States sources 5521
handling machinery for the automation of a Textilsusa plant. cone manipulation and container handling 8818
industrial fabrics. making-up trends 6191
Investronica's Matching System for automated cutting of patterned fabrics 1285
ITMA [1987]. making up and packing machinery 6185
K. Kurz Hessental modular textile storage pallets 3939
knit fabrics. automated system with freeze grippers 6985
knitting, circular. equalization of fabric take off 5936
Knoll Textiles' installation of a computerized storage tube, rack, and bin system for textiles. advantages 3909
linking systems for knitted goods making-up 6986
nonwoven fabrics. ITMA [1987]. machinery trends 6193
nonwovens web handling equipment for continuous processing from Edward Parkinson 1160
overhead materials handling systems, technical advances. computer control 2311
pad-batch systems. edge spreading machinery optimized to reduce faults 433
Planotex. BFE fabric guiding system, digital processing for web analysis 7183
Sausis control for textile transportation. reduce stretching, accuracy 5498

FABRIC MANUFACTURING (SEE ALSO OTHER HEADINGS, SUCH AS KNITTING, SIZING, SLASHING, WARPING, WEAVING, WINDING, AND UNDER SPECIFIC FABRICS)
apparel. frictional characteristics. development of automated fabric assemblies 2656
artificial leather production. progress and significance 2686
Australia. overseas sourcing reduced. increased demand on local mills 3870
Blacky of Switzerland producing polyester fabric apparel for cyclists 2550
Bonar Carelle applies Ultraloft system to produce three-dimensional fabrics 7514
Brazil, knit fabric industry 5044
British interlining manufacturers and their products. buyers' guide 5117
broadwoven fabrics (gray) production in United States. [1987] summary 5820
Burlington's agreement to sell apparel fabrics portion of Blended

Fabrics Division and Prints Division 2250
coloring strategies from fabric manufacturers. producer dyeing, color forecasting, pre-coloring 1382
composite fibers, use in manufacturing fabrics 6718
computer-aided design system evaluated 7884
corduroy production, late ordering by retailers and effect on mills 1731
corduroy, mill executives discuss [1988] market 2651
cotton, polyester and viscose fine-titer yarns. performance in fabric production 3407
cotton. treatment to reduce endotoxins before manufacture 7276
defects. high speed of inspection process 2219
denim production. Avondale's twelve ball indigo dye range with steamer for pure sulfur shades 1931
denim. Burlington's dryfinished, faded denim product. Pre-Washed. finishing process, fabric hand 1984
Dicey Mills manufactures residential upholstery fabric 6734
Doblin Fabrics' Portfolio collection, coordinated prints and wovens for furniture manufacturers. price points, delivery time 1860
Du Pont's producer-dyed acrylic program for home furnishings fabric mills 1639
Elcom 18 from Erhardt and Leimer. process control and communication system used in fabric manufacture 5499
electricity, various uses 1729
electronic technology at ITMA [1987] 4723
engineering principles applied to design of suiting fabrics 1365
fabric preparation. test methods for chemicals and auxiliaries 6849
FASLINC and Quick Response, fabric suppliers linkage council activities 2263
garment dyeing, stonewashing, and other apparel finishing methods 6124
Idealtalia. fabric manufacturers hoping to tap United States market for luxury fabrics 3523
India [1987]. current state of powerloom, handloom, and composite mill sectors. performance 4155
industry. J. P. Stevens buyout proposed by senior management group. proposal details 2255
knits on circular machines in the FX range by Monarch 8310
loom, rapier Model H from Lindauer Dornier. multiple weight options 3429
men's wear, prints. subtle and conservative patterns [1988] with brighter colors 1325
mercerizing machines and their operations reviewed 7572
meshes for reinforcement applications from Kirson 3536
metallized fabrics. manufacture and end uses 1873
projectile loom, Sulzer P7100 unit 5016
projectile. P7100 weaving machines from Sulzer Rueti 1752
Quaker Fabrics concentrates on textured jacquard and dobby upholstery fabrics 2650
ramie. problems with manufacturing 370
rayon fabrics, rise in popularity, for women's wear. BASF collection, BASF executive developments in rayon and rayon blend 2421
silk bulk yarns in men's wear 8227
spandex fibers. pure, wrapped, corespun in fabrics 8046
Texcellana, cotton/wool blend denim fabric by Texas Tech University 2630
tricot and raschel knit plush/velours. end use fields 6675
tricot and raschel knit plush/velours. uses other than apparel. furnishings 6690
Valstar installs production control at Don and Low. fabric producer 5505
workwear fabric engineering, developments 5116

FABRIC PROCESSING, SEE APPAREL MANUFACTURE, FABRIC HANDLING EQUIPMENT, FINISHING, AND SPECIFIC PROCESSES.

FABRIC PRODUCTS (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL, AUTOMOTIVE FABRICS, BAGS, BLANKETS, CARPETS, DIAPERS, DISPOSABLES, FILTER FABRICS, HOME FURNISHINGS, INDUSTRIAL FABRICS, LEATHER SUBSTITUTES, NARROW FABRICS, RUBBER PRODUCTS, SURGICAL PRODUCTS, WIGS)

Allied Fibers' Spectra Shield, Spectra fiber soft body armor 6023
Atmosphere home fabrics display at [1987] Heimtextil in Frankfurt 3801
Australia's National Textile [spring/summer 1988] range. trends in fabrics, colors, and styles 3774
automotive fabric products. requirements, test methods 7075
bacteriostatic fabric system for high degree of sterility 7637
British interlining manufacturers and their products. buyers' guide 5117
curtain fabrics. thermal insulative performance 2680
curtains and draperies in new soft alternative window treatments 2176
damage from hidden defects, improper care labeling 3799
facing material for absorbent articles. combined nonwoven fabric from UniCharm 8382
Fashion Fabrex Show, trends in fabrics and fashions 304
flame resistant. manufacture, processing, end uses. citations from [January 1975-July 1987] World Textile Abstracts 8968
geotextiles, protective clothing. German research 7671
Hydrofil, four new high performance nylon fabrics from Allied 1892
Idealtalia. fabric manufacturers hoping to tap United States market for luxury fabrics 3523
interlinings. selection. applications 2821
linings. classification, specifications, and construction 8596
Natural Phase products by Thomson Company. formaldehyde vapor phase treatment and removal 8544
panel system fabrics from Interior Fabric Technologies. styles, fabric, and customer service 2653
Panotex fire resistant and high temperature resistant fabrics. applications, composition, properties, sample swatches 3524
performance standards for textile fabrics from ASTM 7255
Portugal's textile show. illustrations of fabrics and fashion trends 5577
Premiere Vision show. trends include bright, vivid cottons from European mills 2652
shape-molding fabric with two component structure 8383
sheets, pillowcases and towels, total United States shipments, [1984-1987] statistics 2380
stretch, innovations. Celanese's ESP polyester 305
trim manufacturers and products at Bobbin Show [1987]. appliques, emblems, ribbons, lace, embroideries, and transfers 306
washing with cellulase enzymes 7717

FABRIC QUALITY (SEE ALSO OTHER HEADINGS, SUCH AS CONSUMER ATTITUDES, DETERIORATION OF MATERIALS, DISCOLORATION, FABRIC DEFECTS, INSPECTION, NEPS, PILLING, STAINS, UNIFORMITY, SHRINKAGE, WEAR, AND UNDER SUBJECT HEADINGS OF FABRICS OF SPECIFIC FIBERS)

assessment of cotton/viscose underwear fabric from Textima 4331
loom 4350
ASTM [1988] specifications and standards listings 8931
Caltronic fault log inspection system from IRO-Calator 5115
defects filament yarn fabrics. causes 1841
defects. apparel manufacturer needs to inspect new deliveries 2219
dyeing and finishing. producing first quality fabric. raw materials parameters 2265
fabric defects. evaluation 3080
hand and twist. crepe 1840
hand pigment printing, effect 5279
hand. KES-F testing system for the control of textile characteristics 8714
hand. objective evaluation 8716
hand. spandex. durability 6748
hand. testing. weighted Euclidean distance value versus Kawabata's THV value 7815
imitation model using, scanner control for fabric uniformity, design, abilities 5518
indicator determined for new woven blend fabric 5118

inspection machine, Uster Visotex fabric 5951
IRO/Calator machines. computer integrated 738
Kawabata Evaluation System for objective evaluation of hand in textiles 3054
Levi Strauss. monitoring supplies 3897
luster, factors affecting 1842
mercerization with the Dimensa by Benninger. offers dimensional stability 8458 8459
mohair. fabric quality relationship to mechanical properties 7540
pilling formation and release, CSIRO research. influence of fiber density and structure 4378
proper warping, weft preparation, shuttleless weaving for open end yarns, fabric quality standards 4171
quality control demands of today's market on color woven fabrics 3130
raw material control, supplier certification programs, knitting machine variables 2266
shrinkage of woven fabrics. methods for calculating 667
singeing with Pyrotrop singeing machine improves quality 4418
testing technologies from Agricultural Research Service 7061
thermal resistance and air permeability characteristics in representative Japanese fabrics. air layer 8391
warp yarn behavior. German research 7401
weaving. control of variables which influence quality 5870
weaving. selvage and temples. loom performance and cloth quality 6661
wet on wet processing improved natural fabric quality and reduces energy consumption 6063
wool and wool blend fabrics, system to describe and evaluate quality 1093
Worth Street Rules. interpretation and application of defect point count levels 3081
woven fabric quality appraisal. important factors 3063
yarn diameter. influence on design and properties 177

FABRIC TESTING (SEE ALSO OTHER HEADINGS, SUCH AS ABRASION TESTING, BLEND TESTING, CARPETS, CREASES AND CREASE RECOVERY, FLAMMABILITY, INSPECTION, KNIT FABRICS, NONWOVEN FABRICS, PILLING, SHRINKAGE, STRETCH FABRICS, TEXTILE TESTING, UNIFORMITY, WASH-WEAR, WATER RESISTANCE, WEAR, AND UNDER SUBJECT HEADINGS OF FABRICS OF SPECIFIC FIBERS, AND UNDER SUBJECT HEADINGS OF SPECIFIC PROCESSES)
abrasion resistance of knit fabrics, tests on IT-1M device 238
absorbent characteristics of nonwovens. fluids 6076
acrylate binder concentration in nonwovens 8737
anisotropic properties, tear load, elongation, relation to fibers, finishes 5119
apparel assembly process. testing programs for cost effective production 3829
apparel manufacturer needs to inspect new deliveries for defects. methods advised 2219
appraisal of sized yarn behavior in fabrics with Reutlingen Webtester 4681
artificial knit fur lining fabrics, thermal properties, testing 336
ASTM [1988] specifications and standards listings 8931
automotive fabric products. requirements, test methods 7075
automotive fabrics cause fogging of windows. inferior test methods need improving 7087
automotive fabrics standards 7045
automotive fabrics. blue wool sample for testing of polymeric materials. relative humidity problems 7095
automotive fabrics. outdoor testing cabinets developed 7069
automotive fabrics. statistical service life prediction criteria 7070
automotive fabrics 6246
Azapil photoelectric testing device for knit fabric pilling determination 4351
bagging behavior of knits. Celanese test 6238
blend composition, test method for moisture content 8384
British fabrics. laboratory tests 2681
Bulgarian polyester and polypropylene geotextiles. properties and uses 4352
Caltronic fault log inspection system from IRO-Calator 5115
chemical stability of nonwovens, woven fabrics, artificial leather, resistance to chloroprene latex 307
chromatographic analysis of manganese traces 4670
coated fabrics, flammability testing, small scale 3058
coated fabrics. Federal Test Methods Standard No. 191A. listing 668
colorimetric Raduga-1 device for artificial leathers 5200
composite knit fabrics, quality evaluation method with structural change 5046
composites. drop weight impact testing (Tech. Rept.) 8711
computerized testing flocked nonwovens' strength, influences in model 5120
contact impregnation method, effect on cotton and cotton blend woven fabrics, microscopic analysis 4489
convective heat transfer from human body, effect of fabric 7077
correlation of pilling test methods to develop international standard 7085
cotton and flax fabric backings of Kapron, Lavsan and wool fabrics 322
cotton underwear fabrics, wear testing method 308
cotton woven fabrics finished with thermoreactive resins 5306
cotton, cotton/polyester knit fabrics, dyed with leuko ester dyes, effects 4353
cotton, polypropylene, polyester/cotton woven fabrics, acid resistance, relation to hydrophobicity 4354
cotton/polyester knit fabrics, finishing and dyeing, lightfastness testing 309
crease testing of fabrics. NSTP testing device, improved method 310
deformation of fabric estimated with two dimensional problem 7073
denim for jeans. testing consumer preference to determine ideal parameters 7812
detergency evaluated. surface reflectance, gray scale, color depth 569
dimensional instability, evaluation of test methods for measuring shrinkage and expansion 5467
dimensional stability 7813
diskette liner fabric magnetic media wipe test 7814
drying performance test with slightly alkaline water and thymolphthalein indicator to evaluate cotton, polyester, wool samples 8712
durability studies. review of literature. abrasion resistance, tear strength, breaking strength 8385
durability, effects of processing on wear 6791
dyed nonwovens, soil repellent finishing, special tests on color changes 6025
epoxy resins, filtering. hydraulic resistance of filter cloths 5131
fabric density. automatic measurement device 3060
fabric hand. fuzzy cluster analysis 8713
fabric hand. KES-F testing system for the control of textile characteristics 8714
fabric/fabric abrasion device from Textile Research Institute 6274
fabrics as liquid barriers. development of improved protective clothing for the United States Army 6276
fabrics composed of methacryl amide grafted silk fibers, mechanical properties 1618
flame resistant. manufacture, processing, end uses. citations from [January 1975-July 1987] World Textile Abstracts 8968
flammability. sixty apparel fabrics 4361
fluid spreading in web structures 4675
fluid transport performance in low density absorbent structures 4676
footwear creep ascertained by shaped lever tester 5106
formula to determine air flow through fabrics 4677
formulas for pile orientation, flocking from underneath, higher pile density 4272
friction between nonwoven lining of magnetic media diskette jackets and magnetic media 7316
geocomposite drains. testing, comparing products 7831
geotextiles, woven and nonwoven. fatigue relationship evaluated

7835
geotextiles. fabric types, property requirements and test methods 8399
glass/polymer shoe insole fabrics, tests for suitability, properties 4355
hand evaluation by sight and touch. information processing 2220
hand. Kawabata Evaluation System for objective evaluation 3054
hand. weighted Euclidean distance value versus Kawabata's THV value 7815
high tear load fabrics, tensile testing on PD-40 and adaptation mechanisms 5468
image analysis. general principles, system of Institut Textile de France, applications of technology 3134
in-plane flow properties. structure/flow characterization 1454
influence of fiber content, structure, deformation speed on static charging 4356
ironing at different settings with varying amounts of residual water 577
ITMA [1987]. inspection 2305
K values of knitted fabrics. dimensional stability 2218
KES Control System from Kato Tech. four testers to measure tensile, shear, pure bending, surface friction, roughness 1457
kinetic analysis of leather strength under destruction testing 6280
knots in fabric and knitting. textile defects as possible signifiers 1732
laser goniophotometer inspection of spot bonded fabrics 3832
leather permeability to acid 6045
light penetrability of woven and knitted fabrics, formula 311
lightfastness testing results adapted to Soviet system. kinematic formula 312
liquids. capillary spreading of drops in fabrics. measurement with image analyzer 6277
luster 7078
Mamluk carpet, study of dyes and mordants used in Cairene workshops 5260
Martindale apparatus from James H. Heal and Co. test abrasion resistance 5465
measurement of color change due to benzyl alcohol 5309
mechanical behavior. Texsol, Tensar, Armater, and Nidaplast geotextile microstructure products 7837
NBS and ISO 5657 flammability tests methods compared 8734
needle's force, fabric deformation, influences, tests 5102
needled wool/nylon/nylon 6/viscose, anisotropy 6797
nonwoven filter fabrics. Flotec air permeability tester. Enka 3055
nonwovens. Hercules Honeycomb Trex unit 8715
nonwovens. remote measurement of length and speed. Video Speed Master 8720
nylon 6, viscose, and polyester knit fabrics for footwear linings 6043
objective evaluation of hand 8716
performance standards for textile fabrics from ASTM 7255
permeability testing classification of footwear fabrics. qualitative and quantitative methods 5121
photoelectric method to determine pilling resistance on woven wool blend fabrics, formula 4357
photometric method, light resistance of nylon, polyester, tests 4678
pilling. computer image analysis 8706
polyester and wool. aging and annealing behavior described with stress relaxation curves 8717
polyester knit net fabrics, uses, heat stabilization 5330
polystyrene developed to replace blue wool in automotive fabric exposure testing 7096
polyvinyl chloride fabrics, calendering tests, production environment 5316
preshrinkage mechanism by rubber blanket shrinkage machine. formula for calculating preshrinkage 371
prickle and itch caused by wool fabrics reduced by flat setting 4383
quantification of sacking material quality 3833
ramie. hand analysis with Japanese measuring unit 1616
reflection coefficient in infrared light for undyed fabrics 5122
resistance of fibrous material to forced passage of liquid 4679
Rhoburn flammability tester from James H. Heal & Company 3831
rupture properties of nonwovens predicted 6063
serviceability. furniture and coating materials 6284
sewability, tests 4386
sewing machine interaction, study by North Carolina State University 557
shear. instrument monitors shear stress by maintaining constant shear strain 7079
shrinking and shrinkage force in fabrics during cooling stage 1843
silk/nylon 66 fabrics, dyeing behavior 6932
single jersey knit fabrics. ring versus open end spun 2221
single rip, trapezoid, and Elmendorf, test methods to assess fabric tear strength 3056
skin irritations, prickle and itch, from fabrics. study 6753
soiling, color change, photoelectric testing 5123
spandex blends, structure studied by computerized method 6279
spandex. durability of hand 6748
staining techniques for structure visualization 6282
standardized performance specifications determined by fabric manufacturer prior to sale 797
standards at German federal materials testing authority modified 3809
standards, roll length, width, seam breaking strength and integrity, shedding, tear 3057
strength behavior, assessment. Young's modulus of elasticity 6281
stretching, affect on thermal insulation properties, measurement 5049
structural base, relation to tension damage resistance, woven, needled, knit bases 5100
structural factors affect absorbent characteristics of nonwovens, model 6066
sunlight through automotive glass. actual and laboratory tests, results, discrepancies 7071
surfactants on cotton. use of thin-layer chromatography prior to dyeing 4696
temperature perception relative to textiles. maximum heat flux 1458
tensile strength of fabrics used in uniforms after repeated laundering 1836
tensile testing of viscose/cotton, cotton/acetate, acetate, cotton woven fabrics 313
test methods for nonwovens, performance evaluation for end uses 6798
textile paintings, restoration 5188
textile restoration, preliminary examination, conservation treatments 5105
thermal insulation of apparel fabric, mathematical model 5124
thermal transmittance and air permeability 6278
trends [1987] ITMA 1436
TRI Liquid Breakthrough Tester CS-244. Custom Scientific. penetration of liquid through fabric system 3059
triaxial fabrics, tear strength, rupture strength, bursting strength, elongation 314
tribosensing used to test nonwovens 7816
ultraviolet spectra in sunlight through automotive glass. objectivity of accelerated testing 7072
ultraviolet stabilizers used to reduce fading and degradation of museum textiles 5202
upholstery fabric standards. flaws and defects, roll fabric condition, pattern repeat, pick count 1844
Video Shrink Inspector manufactured by Sick Optik-Electronik. measures fabric shrinkage after processing 7076
viscose/polyester, viscose/polyacrylonitrile, comfort testing 315
VSI Video Shrink Inspector measures changes in fabric shape. optical pattern recognition 5466
water repellent finishing, doubling, effects on fabric properties 6026
water vapor transmission 8732
water vapor transport through flexible porous barrier. gravimetric monitoring systems 2222
water-ethanol separation by pervaporation through silk fibroin membranes 7083
wear in apparel, studies 6754
webs. air permeability. Permea-Tex measuring unit from Babcock

417
weighted silks studied with energy dispersive x-ray spectrometry. comparison with untreated and museum silks 4823
West German civil service, uniform and protective apparel standards testing 3838
wool and flax woven apparel fabrics, deformation during steaming, effects, tests 4358
wool, wool blend woven women's apparel fabrics, pilling tests, suggested changes in standard 4359
wool, woven fabrics, pore structure determination, formulas 316
Worth Street Textile Market Rules, guidelines for testing at upholstery mills 6024
woven fabric pressing evaluated with photometer 6283
woven fabric quality appraisal. important factors 3063
woven fabric, moisture transfer. model for apparel comfort testing methods 5469
woven wool, deformation during production. effect of stretching 374
woven. tightness factor calculations 8718
wrinkle recovery and slippage resistance in fabrics used in apparel 7080
X-ray crystallography to identify fabric's fiber morphology 8710
yarn deformation test methods. German research 7797

FABRICS (SEE ALSO OTHER HEADINGS, SUCH AS ABRASION, AUTOMOTIVE FABRICS, BLENDS, COATED FABRICS, CREASES AND CREASE RECOVERY, ELASTIC FABRICS, FABRIC PRODUCTS, FABRIC QUALITY, FASHION, FELT, FIBER-YARN-FABRIC RELATIONSHIPS, FILTER FABRICS, FLOCKED FABRICS, HEALTHCARE AND MEDICAL TEXTILES, INDUSTRIAL FABRICS, INSPECTION, KNIT FABRICS, LACE, LAMINATED FABRICS, LEATHER SUBSTITUTES, METALLIC FABRICS, NARROW FABRICS, NEEDLED FABRICS, NONWOVEN FABRICS, PILE FABRICS, SELVAGES, STITCHBONDED FABRICS, TIRE CORD, AND UNDER SPECIFIC FIBERS AND PROCESSES)
abrasion of fabrics based on air textured yarns. SEM study 7477
air permeability when wet. interaction of clearance factor and capillary structure 8386
All-Union Research Institute for Textile Materials, new assortment 317
apparel, choices by female college students 2940
apparel. frictional characteristics. development of automated fabric assemblies 2656
ASTM [1988] specifications and standards listings 8931
Atmosphere home fabrics display at [1987] Heimtextil in Frankfurt 3801
blends, polyester/cotton. printing 5282
Bobbin Show [1987]. fabric and fiber highlights 301
breathable, high performance fabrics. new production techniques and evaluation tests 1095
carpet protection, commercial and domestic 8541
classification by apparel end use. planning techniques 8597
collars. properties such as bias stretch, flexibility, stiffness, drape affecting function, fashion of collar 1280
colored fiber reinforced fabrics. Universal Carbon Fibres 1818
colors and designs [spring, summer 1989] in home textiles. J. P. Stevens' predictions 3010
comparison of friction, rotor and ring 5125
computerized method to choose fabrics for protective clothing 6757
Cordore goods. new developments 2654
corduroy. renewed popularity in fashion industry. types and uses 6028
cotton in apparel and home fabric market. growing market share, performance and processing 3224
cotton/polyester. vat and union dyeing with vacuum extraction process 439
curtain fabrics. thermal insulative performance 2680
decorative fabrics, documentary prints for popularity due to historical restoration, antique and reproduction furniture 3022
denim and jeanswear industry, United States. sales, production statistics 2128
Designer Menswear Show [1988]. trends 2842
Du Pont supporting Dacron, nylon and Lycra expansion 6177
effect of moisture on textiles 3540
Fabrex. retro-trends in fabrics and leathers. bigger patterns. bright, cleaner colors 2646
fabrics composed of open end spun yarns, effects on fabric quality, properties 4360
fashion fabric trends 1845
finishing, flame retardant. various agents. textile burning behavior. ignition mechanisms 7648
finishing, soil release. effect of geometry 670
firefighters' protective clothing fabrics. durability to heat and light 2658
flame resistant. manufacture, processing, end uses. citations from [January 1975-July 1987] World Textile Abstracts 8968
forecasts for fabrics [spring 1989] in women's wear 2969
gas discharge plasma treatment, effects on physical and mechanical properties of fibrous materials 102
glossary of terms relating to fabrics made from natural fibers 2400
Heimtextil [1988]. fabric trends and exhibitors 1861
home fabrics. changing trends. new forms, structures, materials, knits- woven competition 3806
hunters' and workmen's apparel fabrics. two new blends of Cordura 5126
impermeable fabrics, breathable. main producers and their trade names 6077
industrial gray goods market [end of March 1988]. secondhand spot market picked up, prices on print cloths increased 2660
industrial gray goods market [third week of March 1988]. activity in cotton sheeting, drill, twills, ducks, print cloth activity 2659
industry. plans by TALC to use computers and lasers to test fabric shipments 2279
international reports. Enka workshop, Comomoda collections, Hom men's fabrics, denim 2647
Interstoff fashion fabric apparel show. trends in fabrics, design, color 1368
intimate apparel fabrics. [fall 1988] prominent trends described and illustrated. colors, textures 2661
intimate apparel [spring 1989] fabrics. major trends 7021
Italian machinery developments. weaving, spinning, dyeing 4740
Lamous. leather substitute. technology and application 2685
linens. Lavant cleanser by Candia Fisher and Carole Beller 2067
men's wear fabrics [spring 1989] forecast 5410
microfiber wiper cloths 8387
moisture-induced changes in fabric structure 2662
multi-axial fabric technology 1801
new lining fabrics, woven and nonwoven. uses, properties 319
New York Fabric Show, dominant trends [spring 1988] 6027
New York Fabric Show, fabrics [fall/winter 1988/1989] 1094
nonwoven flocking, electric field, method, finishing 5329
nylon/cotton union fabrics. nylon advantages over polyester 8388
Original Hanau Fluotest lamp for UV-inspection of fabrics 3834
ornamental textile industry in West Germany. education for specialists 2613
Parisian designers' extravagant, bold fabrics used in designs. examples from Lacroix, Chanel, Dior, Ungaro, Givenchy 2655
peach skin-type fabrics from Teijin, Kanebo, Kuraray 8390
peach skin-type fabrics. Savina PS from Kanebo 8389
Piceme microfiber polyester/nylon blend composite fabric from Toray Industries 5090
polyacrylonitrile. optical brighteners, softeners, influence of concentration on fabric whiteness 1846
polyester/silk waste blends, feasibility. optimal blend proportions 283
polyethylene glycol bound to cotton and cotton polyester blends. creating temperature adaptable properties 477
polypropylene. uses in the home. wear resistance 3549
Portuguese Offer, twenty-first fabric fair, products from major manufacturers 4985
Premiere Vision show. European weavers 2698
Premiere Visions Fashion Fabric Fair. [fall/winter 1988/1989]

directions 318
printed, continuous afterwashing of objectives and machinery 7650
printed, high grade finishing agents 5273
properties of spandex blends predicted by computerized method 6279
protease treated Chinon. frictional electrification. prevention with tin treatment 1966
protective, heat. Hellhake's High-Therm and High-Temp 5127
raincoats, waterproofing without coating 7680
research in spin finish distribution and fabric pore structure at Textile Research Institute 1596
Respi. polyester and nylon fabrics from Kanebo 6755
ring spun and polyester wrapped twistless yarn fabrics with durable press finish. compared 7392
satin, brushed back. growth in women's sleepwear 2945
shape-molding fabric with two component structure 8383
shear behavior of polyester/viscose blended fabrics analyzed with instrument based on design by Behre 1096
shock-absorbing pad for shod animals 8379
silk fabric parameters and specifications. crepe, georgette, chiffon fabrics 5128
silk. definition printing technique 5290
specialty fabrics from Tuellindustrie 2663
Springs Industries' water repellent Ultrasuede fabric and Facile, lighter Ultrasuede version. applications 6756
still air layer adhering to plastic plates and fabric. thickness 2664
suedelike fabrics 2687
tapa conservation. traditional treatment techniques. new methods using vacuum suction table 7515
Texcellana, cotton/wool blend denim fabric by Texas Tech University 2630
Textile Apparel Linkage Council. moving fast to standardize the industry 3993
thermal resistance and air permeability characteristics in representative Japanese fabrics. air layer 8391
transfer printing of polyesters, nylons, acrylics, and blends 4475
Trends Live show at Interstoff. fashion fabrics in apparel 2112
trends [fall/winter 1989/1990] in fabrics and fashions 7668
trends. [fall/winter 1988/1989] fabrics. soft and supple 2657
ultra-water repellent ski-wear fabric. Super-Leocks from Asahikasei 8430
uniform fabrics. abrasion resistance after repeated launderings 7516
uniform fabrics. colorfastness tests. soiling and soil removal tests 6758
uniform fabrics. deterioration after repeated launderings. tear strength 7517
United States [1987] textile and apparel trade deficit 2367
upholstery fabric standards. flaws and defects, roll fabric condition, pattern repeat, pick count 1844
washing machinery. open width and rope form processing 4498
water repellency. effect of surface ribs 1896
wear index and relative economics of uniform fabrics after repeated launderings 7518
women's wear fabrics for [1989-1990]. novelty cloths, color, lingerie fabrics 7015
women's wear fabrics [spring/summer 1989]. trends in fabrics, patterns and colors 2665
wool/polyvinyl chloride yarn and fabric blends, uses, properties 284
woven fabric patterns based on complementary angles 3525
woven fabric planning and CAD/CAM. new economics of design 3428
yarn-dyed, imported. shortages. United States apparel industry blames textile industry's import quotas 4776

FACTORIES, SEE APPAREL MANUFACTURING PLANTS, KNITTING AND HOSIERY MILLS, MILL BUILDINGS, TEXTILE MILLS.

FADING, SEE COLORFASTNESS, LIGHTFASTNESS, WASHFASTNESS.

FALSE TWIST, SEE CRIMPING, TEXTURED YARNS, TWIST.

FASHION (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL, APPAREL--UNDERWEAR, FABRICS, FORECASTS, KNIT FABRICS, CONSUMER ATTITUDES, MARKETING, HOME FURNISHINGS, RETAILING)
activewear fashion trends. [spring 1988] lines from New Balance and Marika Bodywear 2875
Blacky sportswear production 3753
Bloomingdale's and International Wool Secretariat produce commercials focusing on wool apparel 1492
bodywear. [summer 1988] fashion trends 2937
boxer shorts, unisex appeal for expanding market 4601
British industry. research and development 5420
Calvin Klein opens first store in Dallas 5424
chinoiserie in European textiles and costumes 521
clothing structure/appearance features. inferred personality traits 8634
consumer adoption of fashion products and diffusion theory 1372
consumer buying patterns 1356
corduroy. renewed popularity in fashion industry. types and uses 6028
cotton fabrics from Giorgio Correggiari. Motorvator look in sportswear 4611
denim, stonewashed. advantages of drystone method over aqueous method 393
Designer Menswear Show [1988]. fashion trends. exhibit highlights 2890
Designer Menswear Show [1988]. trends 2842
designs [fall/winter 1987/1988], from National Fashion House for Apparel 5407
dyeing socks and sweaters. satisfying market demands with uniform coloration 3598
EXSL [1987] Exhibition of Sports and Leisure. dancewear fashion trends 1366
Fabrex show in London. price competition, marketing, design 1306
Fabrex Show, trends in fabrics, colors, and fashion design 304
fall/winter season [1989/1990]. outerwear yarns joining natural fiber esthetics and synthetic yarn qualities 8226
fashion fabric trends 1845
Fashion Institute of Technology assists foreign governments with setting up similar fashion institutes 2963
fashion shows in Paris for men's, women's, and children's wear, lingerie, and sportswear 2876
Future Classics brand. new division of Bukta aimed at men's wear retailer 3756
Group GFT. use of fashion designers in market oriented management strategy 1477
Gruppo GFT. expansion. production of short runs of top quality goods 4530
Harrogate Fashion Fair exhibits 623
Hartwell's junior sportswear divisions. management and marketing strategies 2964
high performance knitwear. insulated, weatherproofed fabrics 3777
Hong Kong apparel. highlights of new lines. day and evening 3775
Hong Kong fashion shows [fall/winter 1988] preview 3776
Hong Kong retailing. difficulty with establishing consumer profiles 2977
hosiery fashion trends toward lighter weight sheers in skin tones 2971
hosiery fashion trends [fall 1988]. highlights 6237
hosiery trends [1988]. design, fabric, color 1373
influence on manufacturing industry of fancy yarns 8204
Interstoff apparel fair. fashions from fiber producers 3773
Interstoff fashion fabric apparel show. trends in styling, fabric, design, color 1368
Interstoff Trendtable. fashion trends [fall/winter 1988/1989] 1369
intimate apparel fabric, nylon tricot. renewed interest. company expectations 6525
intimate apparel [spring 1989] fabrics. major trends 7021
ISPO Sports Equipment Trade Fair. sportswear fashion trends 1367

jeans, fashion finishes. manufacturers avoid wet processing investments 2063
jeans. baggy, rolled-up, large, cinched waist unisex look in Paris. examples of "mauvais garcon" trend 2877
jeans. resurgence in consumer demand due to new finishing techniques 1374
Kiwi jeans, offers finger size pocket to hold condoms, safe sex marketing campaign 5405
knit, trends for men and women. Orlon acrylic blends 2536
knitwear specifications 8641
Lesage. leading embroidery firm in world 2841
lightweight sweater yarns displayed at [1988] Yarn Fair 7400
London. [spring 1988] trends. short skirts. hosiery. apparel 1370
men's and women's. trends [autumn/winter 1989/1990] 7012
men's wear fashion trends at MAB International Menswear Fair 4612
Milanovendemoda Uoma Exhibition [1988]. fashion highlights 3758
Museum of Vintage Fashion in San Francisco 2965
National Spinning Company color workshop and contests for talented design students 4799
New York Fabric Show, dominant trends [spring 1988] 6027
Olympic Games influence activewear industry, profile of skiwear, fitness, street activewear, and fleece collections 2873
pant fashions [summer/fall 1988] women's sportswear. styles 2943
Pitti Bimbo, Moda Bimbo shows. teen-agers, children, babies 624
Pitti Filati. trends in color, fibers, yarns, fabrics, styles, shapes, accessories 1371
Pitti Uomo Italia [1987]. menswear trends [spring/summer 1988] 606
Portugal's textile show. illustrations of fabrics and fashion trends 5577
Portuguese Offer, twenty-first fabric fair, products from major manufacturers 4985
predicting trends. using predictions in market analysis 1276
printing, discharge. for haute couture fabrics 8527
Quick Response as marketing tool for fashion industry, acceptance by apparel and textile industry 7669
silk trends 2430
skiwear fashions [fall 1988] exhibited. 34th Annual Ski Industries America Show, prominent trends 3781
sourcing fashion, global markets, data on exports 1582
sportswear. [spring/summer 1988] fashion trends 1310
suit, men's, probe sponsored by Clothing Manufacturers Association of America shows. widely accepted 622
sweaters [fall 1988], prominent trends in styles and patterns 4598
tights and stockings at Pitti Lingerie show 627
timing. introducing products to market 1277
trends spurring British manufacturers to invest in new dyeing equipment for quicker reaction time 5231
trends [fall/winter 1989/1990] in fabrics and fashions 7668
trends, acrylics industry hit hard by shift 4846
United Kingdom sportswear industry. Puma's marketing activities 2153
United States retailers staying away from European fashion shows, reasons why, how retailers are dealing with high prices 2949
videos hold promise for marketing 4613
women, middle-aged. design preferences 1375
wool's position in knitwear market. survey of current and future 1389

FASHION--CHILDREN'S WEAR (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL, APPAREL--CHILDRENS WEAR, APPAREL--UNDERWEAR, FABRICS, FORECASTS, KNIT FABRICS, CONSUMER ATTITUDES, MARKETING)
Baby 16 fair. trends [fall/winter 1988/1989]. attendance, problems, exhibits, trends 2089
Cologne Fair, Children and Young People. [spring, summer 1988] fashions 2087
Georges Marciano to open Misfits. company products, and plans 1998
knits for children [fall 1988]. new fashions from designers 4600
Malina Gerber, designer, manufacturer, retailer, profiled 2882
Pitti Bimbo, Moda Bimbo shows. teen-agers, children, babies 624
Salon Internationale de la Mode Enfantine, best selling trends 2088

FASHION-MEN'S WEAR (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL, APPAREL--MEN'S WEAR, APPAREL--UNDERWEAR, CONSUMER ATTITUDES, FABRICS, FORECASTS, KNIT FABRICS, MARKETING)
accessories [fall 1988]. trends in neckwear, belts, and hosiery 2903
Barney's All American Sportswear Company's [fall/winter 1989] collection. dominant items 2090
Baxter International and Pianta, two men's wear lines that combine fashion and high profits. fabrics, products, price points 2887
blazers, jackets, trench coats, suits. England. current trends 2134
casual [spring 1988] apparel 2135
classic British men's wear. resurgence of interest. fashion trends 3761
design trends at SEHM 2905
designer label licensing. Fairbrooke Enterprises. Perry Ellis and Calvin Klein women's coat collections and other new lines 2107
designer. Armand Basi. spin-off of Lacoste development, design philosophy, lines, sales outlets, and volume 2886
designer. British collections [fall/winter 1988]. trends 2888
designer. David Valls upscale knitwear. philosophy, product lines, target customer, growth strategy 2889
designer. Enka [fall/winter 1988-1989] designs from Rini van Vonderen 3755
designer. Gaudi Hombre. Spain's premier fashion show disappoints viewers. troubled Spanish market 2966
designer. Italian men's wear collections for [fall/winter 1988]. Byblos, Gianmarco Venturi, Krizia Uomo 1314
designer. Italian men's wear designer collections at Milano Collezione Uomo 2092
designer. Kenzo's [fall, winter 1988] collection, trends 2896
designer. Michele Savoia's [fall 1988] collection. dominant trends 2093
designer. Milan collections [fall/winter 1988]. fashions from Armani, Ferre, Uomo, Valentino, Bublos, Gigli 2907
designer. Perry Ellis America, Portfolio, and couture collections 2898
designer. Pitti Uomo Italia, conservative and avante garde fashions 3760
designer. S & Sprouse's [spring 1988] collections 607
designer. Sans Tambour Ni Trompettes collection [fall 1988] 2899
designer. suits. Paul Smith, shop owner profiled 3759
designer. West Coast, emphasizing variation of classics in design 609
designer. Workers for Freedom's [autumn/winter 1988] collection. trends and fabrics 2902
designer. [fall/winter 1988] fashions from Parisian designers. trends 2911
designers and trends at Ninth Gaudi Hombre 2909
designers and trends from Paris collections. Yamamoto, Balmain, Miyake, Cardin, Cerruti, and others 2908
designers and trends [fall/winter 1988] Parisian collections. Montana, Dior, Gaultier, and others 2906
Designers' Collective, trends and highlights 2891
designers. French and companies profiled 2091
European fashion shows, trends 2154
formal wear trends [fall 1988], preview 2912
Georges Marciano to open Misfits. company products, and plans 1998
HAKA [1988] exhibition 625
hats, felt. rabbit fur. Christy, English manufacturer profiled 2133
hosiery trends [fall 1988] 4618
jackets. trends from young men's resources at NAMSB 2928
knit sports shirts 2951
leather outerwear sweaters, acid wash denims. specialty store retailers' purchases at NAMSB. [fall 1988] sales outlooks 2919
leather [summer 1988] 612
major trends [fall 1988] jeans market. treatments and products from various manufacturers 2781
new wool fabric types. [spring, summer 1989] 4384

outerwear displayed at the NAMSB show. cotton, wool, muted solids and brights popular 2915
ready-to-wear. Fred Perry company profile. [spring/summer 1988] collection 2892
ready-to-wear. Gitano's plans to enter sportswear category. program details and merchandise 2893
Rifat Ozbek, Turkish-born London designer 2084
shirt and neckwear styles [fall 1988] at NAMSB. trends. retailers discuss strategies to boost sales 2916
shirts. [fall 1988] styles and fabrics 2910
slacks popularity [fall 1988]. manufacturers' products and marketing strategies 2918
sportswear collections for men and boys from West Coast manufacturers. fall trends in outerwear 2922
sportswear directions exhibited [fall/winter 1987/1988] Uomo Moda, styles 1326
Steve Sakamoto and Market Research Active Sports. tracking beach lifestyle fashion trends for retailers 2804
suit fabrics [spring 1989]. patterns and trends 2631
suit. history. apparel and present market position and popularity 2098
suits wool [fall 1988], preview of designer styles 1330
suits, made to measure. merchandising strategies by upscale companies 2924
suits, three button, style trend in tailored clothing market. retailers describe their product line 2923
suits. tailored and casual. [spring, summer 1988] styles reviewed 2136
suits. tailored clothing. increased demand. fashion trends 3762
tailored clothing manufacturer Gruppo Finanziario Tessile. profile 3757
tailored clothing manufacturers at NAMSB. trends include silk blends, fuller silhouettes, pleated pants 2927
tailored clothing, traditional, in men's market. return to designers and fashions that helped the trend 2102
trends [spring and summer 1988] 611
United States retailer buying at SEHM. European buying strategies and acquired merchandise 2901
young men's retail outlook [fall 1988] pessimistic. lack of clear fashion trend blamed 2929

FASHION-WOMEN'S WEAR (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL, APPAREL--WOMEN'S WEAR, APPAREL--UNDERWEAR, CONSUMER ATTITUDES, FABRICS, FORECASTS, KNIT FABRICS, MARKETING)
accessories [fall 1988]. colors and major trends 2115
accessories [fall 1988]. trends in hats, jewelry, shoes, and other items 2114
accessories [summer 1988], preview 1378
bodywear category sales soar 3767
colors [spring/summer 1989], acidic shades and bright colors in combinations 626
daywear and bedtime. Pitti Lingerie. major trends and fabrics for women' fashions 2103
designer lingerie. licensing agreement between Valentino and Warnaco 2104
designer profile. Adrienne Vittadini 1377
designer. Bohan, Scherrer Paris shows. couture collections reviewed 2138
designer. Calvin Klein. fashion empire, design philosophy, collections 2817
designer. cashmere, Seventh Avenue designers' plans [fall 1988]. coping with high prices and tightened availability 2938
designer. eleventh New York PReT fashion show. general trend, designs from Theresa McAllen and Katlean de Monchy 2939
designer. Georges Marciano's new company Misfits. collection, price points 2932
designer. Givenchy spring couture collection, Paris show profile 2140
designer. Italian [spring, summer 1988] styles, feminine lines 2141
designer. lace ready-to-wear evening fashions [spring 1988] 1332
designer. Lacroix, signature collection [spring 1988]. high waists, bell shape, pants 1376
designer. Marc Jacobs and his design career, profiled 2933
designer. Marlene Stewart, costumer and stylist for Madonna. background and present work 2137
designer. Paris couture collections from Ungaro and Lagerfeld profiled 2142
designer. Paris spring couture collections. Lacroix, Lagerfeld, Ungaro 2108
designer. Paris [spring 1988], couture collections. early trends 1390
designer. Patrick Kelly and his designs 2109
designer. Ralph Lauren's accessories lineup, products and licensing agreements 2110
designer. Schiaparelli. history and designs 2968
designer. [fall 1988] lines from Italian designers. major trends 2941
designer. [summer 1988] offerings from sportswear, ready-to-wear, and dresses 1347
designers. fabrics. extravagant, bold. Lacroix, Chanel, Dior, Ungaro, Givenchy 2655
fabric forecasts [spring 1989] 2969
Fashion Week Munich. [spring, summer 1988] styles 2139
Georges Marciano to open Misfits. company products, and plans 1998
gowns. custom bridal. made at Spossa Bella 4521
hats [fall 1988]. expected sales volume, major trends 2118
hemlines long and short for holiday season. looks from major designers 5413
hosiery [fall 1988]. fashions influenced by ready-to-wear 4616
hosiery [fall 1988]. styles and colors for socks, thigh highs, pantyhose 2872
hosiery. ready-to-wear trends affect hosiery [fall 1988] 4617
innerwear [fall, holiday 1988], prints prominent. fabrics, design, style 4605
intimate apparel fabrics [fall 1988]. color, texture 2661
intimate apparel [spring 1988]. importance of texture created by lace and other trims 1379
intimate wear, designer. growth category for manufacturers and retailers 4604
Janine Gallimard. classical milliner specializing in bridal millinery 4520
junior sportswear retailers and manufacturers, market outlook. describe [fall 1988] fashion highlights 3768
knitting instructions for seamless neck-down sweater design 4228
knitwear market [spring/summer 1989]. softer, more feminine trends 2942
Kumaon, India. garment styles. skirts, blouses, shawls, ornaments 3766
layered dressing and men's wear influence seen as prominent in Australian [spring/summer 1988] apparel 3774
lingerie and Tactel polyamide fiber from ICI. advantages in warp and weft knitted fabrics 5647
Mary Cummings, Incorporated. hand embroidered dresses 2025
men's wear fashions influence on women's wear apparel noted at American Printed Fabrics Council meeting 6229
neckwear, scarves [fall 1988]. expected sales and fashion trends 2123
pajamas popular sleepwear item. styles and market outlook 4606
Pret-a-Porter show. [spring, summer 1988] fashions reviewed 2143
prints prominent in innerwear and daywear. manufacturers worry over buyer acceptance and trend longevity 4607
ready-to-wear. Lacroix collection, review. strong shapes, lots of colors 2967
scarves [fall 1988]. trends and sales predictions 4608
separates. Units. knit, square shape separates in one size 4602
sexiness in lingerie, fashion trends, retail advice 8627
shorts [spring 1988]. key shapes 619
skirts, hemline lengths [fall 1988]. major designers describe their fashions 2124
sleepwear [fall 1988] prominent styles, trends, fabrics, brushed back satin 2945
sportswear fashions [summer 1988]. full pants, cropped or bare tops 2144

St. Gillian Group. ready-to-wear. expanding sales market, design philosophy, apparel lines, price points 2111
suits [fall 1988]. manufacturer and retailer expectations, prominent trends 2946
Trends Live show at Interstoff. fashion fabrics in apparel 2112
trends [fall 1988]. highlights 6237
women's wear fabrics [spring/summer 1989]. trends in fabrics, patterns and colors 2665

FASTENERS AND TRIMMINGS
CAD/CAM developments at [1987] ITMA 6676
closures and hardware on display at Bobbin Show [1987]. buckles, buttons, fashion snaps, zippers, hooks and loops 545
components, trimmings, molded on centrifugal force field device, parameters 5360
cotton/leather combinations, problem with cleaning trim. possible solutions 6996
Dolphin Trimming, Inc. company profile. reasons for success. machines in operation 6189
drycleaning leather trim. loss of design 6998
fashion and profit at TAFE [1988] 8588
Kersens of London. company growth. [1988] trends 3720
knit appliques, trimmings, for apparel and footwear 546
quality control method for embossed foil trimmings for leather using government standards 4614
separation of metallic foil trim from backing, problem due to adhesive in garment construction 6209
sewing machine attachment eliminates hanging thread 8616
snakeskin trim. drycleaning precautions 7707
Spanish machinery review. crochet, trimmings, raising, dyeing, printing, medical textiles 1536
TAFE in New York. highlights 2030
trim manufacturers and products at Bobbin Show [1987]. appliques, emblems, ribbons, lace, embroideries, and transfers 306
YKK (USA), Japanese zipper manufacturer. company president, facilities, production and corporate philosophy 695
zipper fastener. Model KA S NR machine from Kettma 3473

FASTNESS, SEE COLORFASTNESS, LIGHTFASTNESS, WASHFASTNESS.

FELT (SEE ALSO OTHER HEADINGS, SUCH AS BATTINGS, NEEDLED FABRICS, NONWOVEN FABRICS, PAPERMAKING FABRICS)
Dilo Di-Loop needle loom for surface structuring of preneedled felts for automotive industry 3488
Dilo Maschinenfabrik's Di-Loom PMF for Beltex papermaking felts 3491
felt needlers for papermills. innovations by Dilo, Beltex, PMF, OD-I 7475
isotropic felts. new randomized fiber deposition system 8343
needled felt in gas filtration. techniques. European market 6762
Nomex T-463 meta-aramid from Du Pont, for high density, light weight felts 869
Oskar Dilo's Beltex technology for production of machine-oriented papermakers' felts 5974
papermaking press felt seam. stronger flap in drying 8421
papermill machinery. production by. advantages 4271
pressed felt. wool. uses 1886
production of felt wadding for hunting ammunition 3484
research results. polypropylene melt blown absorbing felt. high temperature needle punched felt. foaming 1168
roofing felt. jump-fire resistant. Hoechst 1847
roofing materials. felts, glass fiber, and bitumen in United Kingdom 331
wool. avoiding shrinkage when drycleaning garments 4570

FELTING, SEE FELT, FULLING, SHRINKAGE.

FENILON IS A NYLON FIBER.

FIBER 40 IS A HIGH MODULUS (RAYON) FIBER.

FIBER DYEING, SEE DYEING PROCESSES.

FIBER IDENTIFICATION, SEE BLEND TESTING, FIBER TESTING.

FIBER LUBRICANTS, SEE CHEMICAL AIDS TO PROCESSING.

FIBER MORPHOLOGY
activated carbon fibers. microstructure 7304
anisotropic fibers. stress 6264
Bombyx mori silk fibroin. structural changes by drawing 23
canary colored Indian wool. scanning electron microscopy reveals morphological damage to epicuticular cells 1625
CDPET fibers. effect of alkali on structure 1653
cellulose crystallization affected by cotton 4404
cellulose in methylmorpholine oxide. fiber structure 8030
chemical pulp fibers. changes during recycling 62
chemical stress cracking of polyethylene terephthalate fibers 5702
chemical structure and properties 4063
coagulated PBT fibers and films. microfibrillar morphology 2484
comparative thermoanalytical and X-ray diffraction analyses of hair samples 2461
conjugate fibers and filaments 8048
contact angle measurements 4652
cotton fiber. hydrogen bonding in amorphous regions 2411
date palm leaf fiber. X-ray study 3230
diffusion of dye depends on polymeric structure of the fiber 1925
effect of fiber matrix interphase. carbon fiber reinforced plastics 6759
elongated silk fibers. dyeing with acid dyes 8493
fiber orientation control in short fiber composite by loading magnetic moment 6007
fibrils from immature cell wall of plants studied with X-ray and electron diffraction 4003
fibrils in matrix composite polymer fiber to imitate bundles of collagen fibers 5098
hairiness in worsted and semiworsted yarns. German experiments 7362
HMLS polyester tire cord. development of fibril-to-fibril chains by Hoechst Celanese 8211
hydrocellulose. structure. spin probe study 8031
influence of structure types on strength in fibers and films 4834
inorganic fibers, high performance fibers 2463
IPP. whole pattern approach to structure refinement problems 3288
kidney-shaped multilayer polyacrylonitrile fibers. birefringence phenomena 899
KSL (S. M. Kirov Institute) device for fiber orientation, straightening tests 4087
melt blowing polypropylene resins. morphology and mechanical properties 4285
microfibrils identified in tobacco leaf cells and Acetobacter xylinum 4004
microporous polyolefin hollow fibers. structure and properties 3287
nonwoven fabrics, thermally bonded 6068
nylon 12 properties compared to nylon 6 and nylon 66 during high speed extrusion 8047
nylon 6. generalized mechanical properties in fiber formation 2476
nylon 6/PET polymer blends. structural and morphological features of melt spun fibers 5712
optical properties. reflecting and refracting properties of cross section 5456
PABI/CPAN. structure and properties 7299
PBT. microfibrillar morphology. SAXS 2483
PEEK fibers, effects of take-up speed, drawing, and heat treatment on structure 882
PET. after heat setting 5703
pigmented polypropylene filaments, structures and properties 4060
plasma etching changes structure of polyacrylonitrile and polyethylene terephthalate fibers 5645
polyacrylonitrile fibers treated with stannous chloride 1254
polyester fibers. effect of morphology on fracture behavior and

tensile deformation 5706
polymer fabrication process in relation to nonuniformity in filament diameter 4125
polymers. using X-ray diffraction, thermal and spectrographic analyses 8119
properties of mazri. investigation of twist on drying, moisture regain and retention comparison with jute and sisal 1614
rabbit hair fiber. morphology and chemical composition studied. properties 4819
ramie. degradation from bleaching with sodium hypochlorite and hydrogen peroxide 5176
rayon grafted with acrylic acid. decrystallization studies 4040
rigid polymers transformed from liquid to solid state 7353
rotor-spun viscose fiber. effect of spinning on fiber configuration 8694
silk fiber bulkiness modification through freeze drying 6475
silk fibroin crystals. effect of copper on crystal form 26
silk, cocoon filament. mechanical properties and breeding effects 8003
silk. fibroin crystal. analysis of structure by X-ray and electron diffraction methods 3232
spider silk, superior tensile strength and elasticity 832
structural changes in liquids. ultrasonic investigative method 3817
swelling treated silk. surface and fracture morphology 27
synthetic fibers. structure and function 3279
ultradrawn polyethylene. structure and relaxation processes 8688
viscose fabric surface. effects of sunlight exposure 1895
viscose fibers in knit fabric production. water retaining properties 1685
wool. ash and mineral content. polyester yarn. German research 7363
wool. glycolipids contribute to bi-layer structure in the beta-layers of the cell membrane 4824

FIBER QUALITY (SEE ALSO OTHER HEADINGS, SUCH AS CONSUMER ATTITUDES, CRIMP, DETERIORATION OF MATERIALS, FRICTION, INSPECTION, UNIFORMITY, AND UNDER SUBJECT HEADINGS OF SPECIFIC FIBERS)
Australian goat fibers. status of crossbred grades 6470
control of air flow, feeder to ensure cotton quality, even flow 4081
cotton fiber quality evaluation developments 8680
cotton tensile properties analyzed. advances in spinning technology 1443
HVI cotton fiber testing. drawbacks and potential 8679
impact on spinning operations 5602
Pakistan upland cottons. fiber characteristics 7987
rotor spinning demands for finer, stronger, longer fiber properties 3356
silk fiber properties. India. comparison between Hosa Mysore and Pure Mysore 6474
spider silk, superior tensile strength and elasticity 832
swelling behavior of cellulose fibers in liquid media 3255
synthetic. fiber cross-section modified results in improved fiber properties 6519
wool fiber whiteness formula, ZBD meter 3045
yarn hairiness relative to fiber properties 1719

FIBER TESTING (SEE ALSO OTHER HEADINGS, SUCH AS BLEND TESTING, CHEMICAL TESTING, COTTON FIBER TESTING, CRIMP, ELECTRON MICROSCOPY, FRICTION, MICROSCOPY, SPECTRUM ANALYSIS, WOOL TESTING, X-RAY, AND UNDER SPECIFIC FIBERS)
absorbency. single fiber wetting measurements 4651
anisotropic fibers. stress 6264
bicomponent yarns with different staple length. properties of cotton/polyester yarn during spinning 3821
blends. estimation of composition in binary mixture with Brabender moisture tester 5455
Celanese PBI. properties and uses 5603
changes in polyacrylonitrile-based carbon fibers' conductive resistance after oxidation, carbonizing 4047
comparative study of physical and chemical characteristics in silk from China, Brazil and South Korea 7800
compression resilience tester. applications in fiber, fabric testing 8677
Computer Aided Tensile Testing System developed by Du Pont and Instron 1468
conductive fibers. absorption, scattering, thermal radiation 7801
contact angle measurements 4652
contactless length measurement of nonwoven webs 660
cotton and viscose fibers. X-ray orientation profiles. changes due to swelling and stretching treatments 5604
cotton tensile properties analyzed. advances in spinning technology 1443
crimp determination. bulk testing standard from ASTM, Du Pont 8686
defects in wet-lay nonwoven fabrics. types, creases, remedies 6051
density with Shirley Fineness Maturity Tester. influence of staple plugs 6502
density. Shirley Fineness Maturity Tester. trials on acrylic and polyesters 6503
determination techniques for modern manmade fibers 7060
DNA identification of animal hair or wool samples 7998
fatigue behavior of PET tire cores, degree of polymerization and twist 1449
fatigue tester based on biaxial rotation for fibers in vacuum and gaseous environments 3816
fiber diameter. measurement methods compared 4653
fluorine fibers, strength properties determined for needled nonwovens production 50
Georgia Tech research on fiber formation. high performance carbon and ceramic fibers 4046
high molecular weight. tests on physico-mechanical properties 4866
hydrocellulose. structure. spin probe study 8031
identification, solvent test for fiber. blends, modified, and bicomponent fibers 1444
image analysis of tracer fibers in nonwovens webs. study to increase cross-directional strength and improve fabric uniformity 5660
image analysis 1441
infrared photoacoustic technique for orientation of Kevlar 49 fibers 7798
ion-exchange fibers, bonding, sorption of insulin molecules, tests 5679
kenaf fibers, acoustic testing device for tear load, computer program 14
Labspin small scale melt spinner from Extrusion Systems. bought by Man-Made Textile Research Association 4842
manmade, manmade/natural, natural fiber and yarn testing device, static charging 51
melt spinning of petroleum mesophase pitch 6509
metal cation sorption rate by wool fiber 6480
microtomy. modified paraffin process employing Carnauba wax 1445
mohair, meduliated fibers. SAWTRI study 2426
monofilaments. technology and applications 8083
optical properties. reflecting and refracting properties of cross section 5456
plasma etching action 7802
Polish computerized microscope system for fiber diameter measurement 5512
poly(1,4-butylene terephthalate), high molecular weight through polycondensation 917
polyacetylene fibers. electrically conductive 5713
polyacrylonitrile dyeability, suitability for blending 419
polyacrylonitrile thermal processing, oxidation levels 5723
polypropylene fiber content in bicomponent blends determined using xylenes as a solvent 4838
production, molecular structure, relation to fiber characteristics 4011
properties. evaluation 6428
pull-out test from elastic matrix 7803

relative wool fiber strength, Polish method compared to Australian 4017
rotor spinning. fiber friction levels studied, data used to develop lubricants 4935
separation. measurement used to evaluate combing 657
silk evaluation by computer 5457
silk fibroin degradation, method of estimation 766
sonic modulus. peculiarities in comparison to static moduli 8675
spinning mill yarn and fiber testing methods and planning for product quality and uniformity 3828
staple length measurement, optical method in air current 4654
static and dynamic mechanical properties of nylon 66 annealed in glycerol 6528
structural changes in liquids. ultrasonic investigative method 3817
tearing resistance in paper 2233
technology introduced by Agricultural Research Service 7061
textured filament. equipment from Rothschild Instruments, Shirley Developments, and Textechno-Herbert Stein 8691
ultradrawn polyethylene. structure and relaxation processes 8688
viscose rayon and nylon 6. heat of moisture sorption. measurement by heat transfer calorimeter 1446
weave type determined by digital image processing 2701
wool diameter testing methods, lanametry and air flow. air flow preferred 4015

FIBER-YARN-FABRIC RELATIONSHIPS (SEE ALSO OTHER HEADINGS, SUCH AS FABRIC GEOMETRY, YARN GEOMETRY)
fiber types, processing, yarn types and characteristics. types of weaves 3321
fine fibers. relationship to rotor spinning processes and productivity 6590
market demand for higher quality cotton products, corresponding need for better processing 8157
mathematical calculations of fiber properties used to engineer textiles 5155
spinning, open end. fiber length and yarn quality 6591
twisting, rotor. cotton fiber requirements 6577
viscose/polyamide looped yarns. effect on hygienic properties of fabric 320
weaving, size composition in relation to adhesive force 1768

FIBERFILL, SEE BATTINGS.

FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS BAST FIBERS, BLENDS, BRUSHES, CELLULOSE FIBERS, ELASTIC FIBERS, EPITROPIC FIBERS, FIBER-YARN-FABRIC RELATIONSHIPS, FIBER QUALITY, FURS, GLASS FIBERS, HAIR FIBERS, HOOKED FIBERS, INORGANIC FIBERS, INTERFIBER COMPETITION, LEAF FIBERS, MANMADE FIBERS, PROTEIN FIBERS, SPANDEX FIBERS, AND UNDER SUBJECT HEADINGS OF SPECIFIC FIBERS AND PROCESSES)
asbestos alternatives. risk potential of synthetic fibers 11
Avtex Fibers, largest rayon producer, closes plant 8789
buyers' guide for yarn and fiber [1988-1989]. product and supplier listings 6617
Celanese PBI. properties and uses 5603
ceramic fiber yarn and webbing, asbestos substitutes for high temperature applications 870
chemical. growth in European home furnishing industry 6259
composites developments. material design concept 1080
conductive. PAN based carbon, aluminized glass, nickel coated graphite 1166
conjugate fibers and filaments 8048
cushioning products from fiberfill and fiber/down combination producers 3802
damage at higher rotor speeds 2522
damage, minimized by pin arrangement for tearing cylinder by H. Schirp 3326
European carpet sales boosted by fiber producers' new high tech fibers and promotional activities 4641
fiber producers in United Kingdom 1696
fibers from silkworm bacteria being studied by Japanese 1654
Fibersorb from ARCO. fibrous superabsorbent 883
film tapes and monofilaments 8049
finishing, flame retardant. various agents. textile burning behavior. ignition mechanisms 7648
Fleissner introduces processing concept. benefits 2481
future. developments. textile science and engineering 6029
graphite fluoride fibers. synthesis, properties, applications 1829
Greenville Fiber Producer Conference. attendance, products, technology, seminars 6426
hairiness in worsted and semiworsted yarns. German experiments 7362
high performance fibers. processing, structure, properties, and end uses 4048
hosiery and men's underwear fibers and yarns from various manufacturers 2535
hosiery. guide to yarns and fibers. companies, products, end uses 2534
hydrophilic. Hydrofil new fiber from Allied Fibers. advantages 5661
India's multifiber policy. case for including raw jute presented 1612
industrial textiles. properties and uses 3202
industry executives discuss fiber outlook [1988] in the shadow of failing apparel sales 4801
industry review, analysis. production, cellulosics, asbestos, nylon-aramids, graphite, polyolefin, organic polymeric 804
industry, Wall Street expects continued moderate growth [1988] even though apparel demand has fallen 4802
influence of structure types on strength in fibers and films 4834
international fiber market and community, export, production, policies. main market influences 6427
International Symposium on Specialty Animal Fibers, papers reviewed 18
knitting. contribution to wear on elements 4264
laser radiation action on fibers. basic stages and threshold characteristics 7361
management of small fiber extrusion plant 8768
monofilament and film fibers. overview of industry 8050
neochrome. Courtelle open end process. breakthrough 5662
polymers, high performance, by varying feed polymers (Conf. Paper) 8036
polypropylene slit tapes and monofilaments. production systems 8051
processing trends seen at [1987] ITMA 803
properties. evaluation 6428
silicon carbide and boron filaments made by chemical vapor deposition 7317
specialty natural fiber market. current status and future prospects 2422
staple fiber bundles in tension. tangent compliance 3
synthetic and natural fibers compared. future prospects. world-wide situation applications, demands 1601
transfer in automobile carpeting. forensic research 3818
trends in consumption. Financial Times Conference, paper 2238
United States per capita consumption of fibers, survey 4803
United States [1987] mill consumption, imports and exports, domestic consumption of natural and manmade fiber 3201
United States. fibers, textiles and apparel industry. history. changes. policy options 7859
wool, preparation. machinery for drafting and roving 4086
wool. ash and mineral content. nylon 6 preparation. German research 7363
worldwide consumption of cotton, wool, manmade, cellulose fibers since [1960] 4001
worldwide consumption of fibers [1964-1986] 8942

FIBRILLATED FILMS, SEE SPLIT FIBERS/SLIT FILMS.

FIBROIN, SEE SILK.

FILAMENTS, SEE FIBERS.

FILAMENT YARN PROCESSING, SEE YARN PROCESSING--FILAMENT YARNS.

FILAMENT YARNS, SEE TEXTURED YARNS, YARNS, ZERO TWIST YARNS.

FILLING, SEE WEFT.

FILM-FIBERS, SEE SPLIT FIBERS/SLIT FILMS.

FILMS (SEE ALSO OTHER HEADINGS, SUCH AS SPLIT FIBERS/SLIT FILMS)
aromatic polyamide-imide. high modulus fibers and films 5711
cellulose dialysis membranes for hemodialysis. Akzo substitution-modified cellulose membrane 7758
cellulose films. calculating destructive stress at break 7318
cold drawing of polymeric fibers and films. rheology 7293
Courtaulds taking over Liberty Fabrics in expansion of elastomeric fabrics division 7231
digital film recorders. computer generated compensation tables for color transparency-film types 6286
dry versus liquid films in laminated fabrics 271
film reinforced laminated nonwovens. hospital applications 1110
gravimetric method to monitor the rate of water transport through a flexible porous barrier, Textile Research Institute 3837
hydrocellulose film. control of plasticizing process 3261
influence of structure types on strength in fibers and films 4834
isotropic and drawn poly(vinyl alcohol) dried gel films. alpha-relaxation 8733
Japanese polyester film manufacturers expand programs 77
Johnson and Johnson develops laminate wound dressing 5993
laminates. developments. reinforcing fabrics 1059
Luprintol FBT. binder and film former in transfer-paper printing with Bafixen dyes from BASF 5191
melt blown. Biax system 5670
membranes. concentration profiles of permeant during pervaporation 8392
metalized. coating or laminating fabrics. methods, markets 1146
MicroPore develops waterproof, breathable fabric with Kynar Flex 2800 film 6721
mulches and film used by United Kingdom horticulture industry. test data 348
nylon 6. concentration profiles of acid dyes in foaming method 8521
oxygen atom interaction with materials. materials exposed to low Earth orbit space environment 7359
packing sack production in Soviet plant. extruders, winding, warping equipment, raschel machinery used 3526
Perkins-Duffy new slitter/rewinder line, Eagle C-2, for plastic film and converting 2493
poly(2,2'-dichloro-4,4'-biphenylene pyromellitimide). high tenacity high modulus film 884
polyethylene polypropylene blend films prepared by gelation crystallization from solution. crosslinking effect 1655
polyethylene surface films prepared on high strength polyethylene fibers 8102
polyethylene terephthalate films. effects of draw ratio and annealing temperature on phase indices and tensile properties 87
polyethylene terephthalate films. effects of organic solvent pretreatment on dyeing properties 453
polyethylene terephthalate films. effects on uniaxial and biaxial extension on intrinsic fluorescence 2485
polymer films, fibers, and plastics in home furnishings 6507
polypropylene. film tape production and fiber extrusion properties 5714
polypropylene. molecular characteristics, influence on properties of oriented films 5129
polyurethane. direct coating process for water repellency on leather and other textiles 6156
processing with Malimo stitchbonders. tufted fabrics 6730
research, present and future. textile science and engineering 6029
Rextex. microporous polyethylene film developed by Consolidated Thermoplastics 1056
Saunderson correction applied to translucent film laid over opaque substrate 3843
silk fibroin films, regenerated. effect of structural changes on surface tensions 825
Tedlar from Du Pont. polyvinyl fluoride film for awnings 6760
viscose film spinning into sulfuric acid precipitation baths. decomposition of cellulose xanthate 4845

FILTER FABRICS (SEE ALSO OTHER HEADINGS, SUCH AS AIR POLLUTION, DUST, ENVIRONMENT)
air permeability tester. Flotec from Enka 3055
bag filter fabrics. evaluation in pulverized fuel fired boiler applications 7519
baghouses. fabric filtration, mathematical model 7520
classification system according to production, fiber type, shape 5130
epoxy resins, filtering. hydraulic resistance of filter cloths 5131
flow velocity and stress fields 6761
fungal mycelia and fibers. Shirley Institute applies for patent for nonwovens production 1150
geotextile filtration fabric structures in drainage applications compared 6781
geotextile. synthetic drain envelope effectiveness. evaluation model 6782
geotextiles as drain elements in small earth dams 7042
geotextiles. fabric types, property requirements and test methods 8399
geotextiles. functional requirements. testing considerations 6780
hollow cellulose fiber membranes used for kidney dialysis 5658
INDEX [1987] summaries of papers. gas filtration 3527
Lenzing viscose fibers incorporating carbon 3315
mechanisms of filtration. TRI studies 2667
melt blown fabrics. Exxon process 6061
melt blown polyolefin 5669
MGF Gutsche's Porotex micro-filters and their antistatic features 1848
microglass from Bayer 8053
micromembranes. high tech and low tech application directions, manufacture 3528
needle felts in gas and dust filtration. book 1167
needle felts. needle effects on filtration response 1097
needle penetration depth. effect on filtration performance 2666
needle-bonded polypropylene fibers as filter fabrics. type and size of needles 6030
needle-bonded polypropylene fibers. new gas and solid filtration apparatus 6030
needled felt in gas filtration. techniques. European market 6762
needled nonwovens for gas filtration, structures, compositions 363
Nomex T-463 meta-aramid from Du Pont, for high density, light weight felts 869
nonwoven and woven fabrics in industrial applications 6808
nonwoven fabric filters. processes controlling dust cake release 1104
nonwoven filter media. constructions and filter mechanisms 3546
nonwoven, fibrous. structure and mechanism 5998
nonwovens used in filtration. profitable ventures for suppliers 1882
polyacrylonitrile. effects of sulfur dioxide and nitrogen oxide 8393
polyester (Lavsan) blended with rust-resistant steel fibers for filter fabrics 111
polyester microfibers used by Sanina-Belseta and Asahi Chemical Industry for leather substitutes, filters, and apparel 4869
polyester nonwovens. denier blends versus filtration and air flow 8347
soil structure and geotextile filter envelope performance 6785
static electricity eliminated by using polyacrylonitrile metallic fibers 321
Techtextil Trade Fair, Frankfurt, technical fabrics, fibers 6421
Teijin's three super fibers using PPS, PEEK, and PEI base resins 5710
vinyon. properties and applications 6042

FILTERS (SEE ALSO OTHER HEADINGS, SUCH AS AIR POLLUTION, DUST, ENVIRONMENT)
air. Luwa APF for textile plants, high lint processes 4753
air/gas/dust filtration. nonwoven filter media, baghouse and liquid filtration 1098
bag filter fabrics. evaluation in pulverized fuel fired boiler applications 7519
baghouses. fabric filtration, mathematical model 7520
carbon fiber adsorbents. cleanup of gas discharges from acetone vapor 8846
cigarette filters. modified acetate tape increases selective sorptive power 8009
closed loop recycling system using ultrafiltration to separate polymer sizing and purity effluent 8445
coating, improved Micro-Porotex. MGF Gutsche 6154
condensing filtration air pollution system from AETELE group. system features, benefits 5544
cotton dust in mills investigated using computer model 4754
Downflow or D-Range dust control booth and filtration for safety in dye house 5548
dyeing industry. dust control system, Sintamatic filtration system 5547
electrostatic filter system 8909
electrostatically charged fibrous filters. deposition behavior of particles 1099
exhaust discharges from toxic sulfur-containing compounds. biochemical clean-up method 7904
fabric dust filtration. applying computer models for design 2316
filter cartridges in industrial dust removal. point-sealed nonwoven filters 1100
filtration mechanisms. fibrous nonwoven filter media structures 1101
filtration, electrodialytic water splitting 6385
flow velocity and stress fields 6761
frame filter press for bubble wash-out of viscose waste from filter elements 5542
Fregon filters control temperature and humidity in refrigerators 6763
geotextile filters compared with mineral granulate filters 302
Haver and Boecker wire filter for polymers 8394
Luwa automatic panel filter (APF) air filtration system 3140
Luwa automatic panel filter (APF) for cleaning air in spinning and weaving mills 3139
Luwa automatic panel filter for spinning and weaving mills and final filtration in textile waste removal 3136
Luwa's APF automatic panel filter 6370
mechanisms of filtration. TRI studies 2667
meltblowns in filtration application 350
membrane filtration of sodium hydroxide solutions 4765
membrane filtration used to produce desalted and concentrated fluid dye compositions for dyeing leather 5267
nonwoven fabric filters. processes controlling dust cake release 1104
nonwoven needlefelted filter cloths in hot gas filtration. new filter media 1103
nonwoven products manufacture. needle punching, from BTRA 6727
nonwovens in filtration systems. filtration mechanisms and cartridges 1102
nonwovens. international market 6796
panel filter, Luwa's automatic type APF. air filtration systems 4738
panel, APF automatic filter. from Luwa 4737
sodium hydroxide. recovery and reuse from industrial effluents 4766
solvent filtration with single plate, single charge rotary whirling filter by Boewe for drycleaners 6213
storage filters and cleaned filters. separation behavior 1105
Tex-o-Drain filter from Texel. needlepunched polyester sandwiched around polyethylene core 6770

FINISHES (SEE ALSO OTHER HEADINGS, SUCH AS OIL AND WATER REPELLENT FINISHES, RESIN FINISHING AGENTS, TEXTILE CHEMICALS, AND UNDER SUBJECT HEADINGS OF SPECIFIC PROCESSES)
anisotropic properties, tear load, elongation, relation to fibers, finishes 5119
BSK-70/2 latex for carpet coating 5325
care procedures for finishes and trims 6081
chlorophenol determination by ultraviolet absorption 1256
Ciba-Geigy's Braxan WF polyurethane finish for non-felting and washability in wool fabrics 2786
concentration determined by fibers needed as base in artificial knit fur 5326
cotton fabric, sodium sulfide, effects on starch 4406
cotton fabrics. additives and aminofunctional silicones 4486
crease resist crosslinking agents. durable press. chemical fundamentals of finishing agents 3657
developments, improved Soviet products 5166
DeVilbiss contactless spray applicators for high loft nonwovens 3677
direct, azoic dyed materials affected by DMDHEU resin, softeners, silicone emulsions, flame retardant, other finishing agents 1251
DMDHEU finishing and reactive dyed cotton fabrics 6878
durable press cotton fabrics with low formaldehyde release. use of scavengers, catalysts 1965
effect on performance of disperse dyed fabrics 1938
equipment, laboratory, and dye and finish formulation at [1987] ITMA precision of control 4401
evaluation of Bayer and Ciba-Geigy insectproof finishes 4488
fabric comfort properties 8433
flame retardant cotton fabrics based on phosphonium precondensate and urea 479
flameproofing cotton fabrics. method 3529
fluorochemical finishes. method for identification of fluoroaliphatic group 6145
formaldehyde analysis. potential primary standards as replacements for formalin 382
formaldehyde liberation during prolonged storage of durable press textiles 6143
high grade finishing agents for printed fabrics 5273
Hoechst's modified glycol, non-formaldehyde shrinkproof finishes for cotton fabrics 482
hydrolase used in degumming silk fabrics 8455
hydrophilic emulsion finishes from acrylic resins, eliminates some undesirable characteristics of synthetics 1967
Japan. special finishing agents and processes. trend in finishing mills toward short cycle production capacity 2787
latex/phosphorus finish for viscose, viscose/acrylic, flameproofing properties 6938
micro-encapsulated finishes being developed at Shirley Institute. technique, reasons behind finishes, end-uses 5327
microencapsulation finishes from Shirley Institute 6138
microencapsulation for hygienic, odoriferous, and fire warning applications 6148
N-methylol applied to viscose linings to lessen abrasion 8359
N-methylol/sodium fluoroborate shrinkproof finish for cellulose fabrics, tests 4487
nonwovens and knit fabric finishing in the face of modern market demands 3552
oleochemical surfactants and lubricants, use in textile industry 8556
optical. determination of effectiveness on wool by ultraviolet sensitivity 4649
parameters for glyoxal use instead of formaldehyde, catalysts, processing 4497
pearl effects on stitchbonded nonwovens using Tanaprint CR finish 5294
Persistol E/8-oxyquinolinate copper, germ, waterproofing 5302
polycarboxylic acid treatment for wrinkle-resistant cotton fabrics developed by USDA 7643
polymer dispersion products from Hoechst for multiple applications 2788
polyurethane, reactive water soluble, polyester and rayon blends treated with 481
Raufil PVC-coated monofilament bundle yarns from Rehau 3660

Rothermael Finish Analyzer. infrared spectroscopy used to measure concentration 8432
Rothermal Finish Analyzer. rapid estimation of finish level 6318
Sandolube products to prevent sewing damage 8610
Sequa Chemicals' Permafresh 9073 durable press finish for all-cotton fabrics 1964
silicones. chemistry of polysiloxanes 7644
sodium bisulfate. uses for conferring antifelting properties on wool 2783
spin finishes and polyalkylene glycols as additives 5635
spin finishes for staple fibers, tire cords, flat yarns. requirements, influence on dyeing, friction, static electricity 1262
spin finishes. effects on coated industrial fabrics 6039
spin finishes. friction reduction. antistatic agents. stabilizing agent 7319
spin finishes. function. composition. development 1665
spin finishes. polyalkylene glycol 8546
spin finishes. polypropylene. Schill & Seilacher 6146
spin finishing. static control of manmade fibers. finishing agents 6504
spin. air jet texturing 5805
spin. analysis of texturing process parameters 5808
Super Soft from Nisshinbo Industries, improved washing capabilities for fabric 6937
technical finish, printing 5274
titanium dioxide and a fluorocarbon on cotton Kevlar 29 blend canvas fabrics 2782
trade name listing 7241
types of finishes, differences, application, quality 5315
water soluble copolyesters as antistats for Lavsan fiber 3656
water vapor transmission considered 8570
wool. felting. nucleophilic reagent/cationic surfactant/cationic resin mixture 2795

FINISHING (SEE ALSO OTHER HEADINGS, SUCH AS CHEMICAL MODIFICATION, CREASING AND PLEATING, CROSSLINKING, DURABLE PRESS, DYEING, FINISHES, FINISHING--KNITGOODS AND HOSIERY, GRAFTING, INSTRUMENTATION, MOLDING, PROOFING, RESIN FINISHING, SOIL RELEASE FINISHING, SOIL REPELLENT FINISHING, TEXTILE CHEMICALS, WASH-WEAR, WASTE TREATMENT--EFFLUENT, YARN PROCESSING, UNDER SUBJECT HEADINGS OF SPECIFIC FABRICS, SUCH AS CARPETS AND PILE FABRICS, AND UNDER SUBJECT HEADINGS OF SPECIFIC FINISHING PROCESSES)
acid hydrolysis of labile nitrogenous linkages. increased resistance 7639
additives. market growth forecast in Europe due to increased demand for natural fibers 6809
aftertreatment of jeans. use of air entangled thread to prevent seam breakage 1349
Ahiba's MPI laboratory technique to determine finishing, dyeing parameters 454
alkaline waste water neutralization with flue gas 2322
ammonia finishing treatments for woven linen and ramie fabrics 399
ammonia-mercerized cellulose. improved physical characteristics of cottons 7645
anti-felt finishing of wool and wool synthetic blends 1902
apparel manufacture, pressing and finishing operations outlined 3709
asbestos fabrics. finishing with polymeric dispersions to reduce release of toxic dust 1968
automatic garment feeding into steam tunnel. streamlining polyester/cotton workwear processing 2069
bast and bast blend textiles. Central Research Institute for Bast Fibers 5168
batch dyeing. quality control 1933
behavior of Lenzing Modal viscose, alone and with cotton, in dyeing and finishing 3316
bleaching, chlorite. process. economical, environmentally safe 6823
Blue-J 1000 stoneless stone wash and 2000 Stoneless acid wash system for denim garments 2789
bobbin radial compactness distribution. calculation 6576
carpet manufacturing and processing machinery displayed at ITMA [1987] in Paris 1001
chemical finishing of cotton and cotton blend knits 6939
chemical processing. present status and future developments 7558
Ciba-Geigy's Braxan WF polyurethane finish for non-felting and washability in wool fabrics 2786
combed sliver dyeing, treatment with thiocarbamide, increased chromatic absorption 4444
combination bleaching and scouring process. sodium chlorite 6824
comparison of seed and fish oils in leather tanning. methods and results 1803
computer integrated manufacturing from design to delivery 4719
computerized control in dyeing and finishing. new systems, benefits 7553
conference, West German Dyer's [1988] 6830
contact finishing, measurement of finish evenness with MMP-1 radiation device 4693
contact impregnation method, effect on cotton and cotton blend woven fabrics, microscopic analysis 4489
cotton fabrics from core yarns containing high tenacity manmade fibers 7391
cotton fabrics, woven and double knit. preparation for pad batch and continuous dyeing 384
cotton finishing, reuse of wastewater's heat, method 5529
cotton knit fabrics. dimensional stability through RPR-Quality System 390
cotton textiles. durable press reactants based on cyclic ureas. solid probe mass spectrometric analyses 7640
cotton woven fabrics applied with liquid ammonia to prevent shrinkage 483
cotton, synthetic fabrics. techniques for high quality, low temperature plasma cotton pretreatment 1180
cotton. cellulose degradation during prolonged heat treatment 3558
cotton. treating waste water with dioxide molecular neutralization process 4763
cotton/polyester knit fabrics, finishing and dyeing, lightfastness testing 309
Creaset, fixes creases or pleats with silicone elastomer 5381
cystein oxidation at surface of wool fibers. removal of cleaved proteins needed for shrink resistance 4771
Czechoslovakian tests and methods on foam finishing. coating, carbonization, waterproofing 4384
defects. chemical, mechanical, dyeing. German research 7566
denim, wet finishing process. stonewashing, acid washing, overdyeing 1181
denim. Burlington's dryfinished, faded denim product. Pre-Washed. finishing process, fabric hand 1984
description and characteristics of copolymers for textile finishing 6500
dioxide molecules in steam used to neutralize alkaline in waste water from cotton finishing 4761
directory for United Kingdom companies 6811
Directory of UK Dyers and Finishers, Including Bleachers and Printers 8921
dyeing. automatic management of bobbins and skeins. development 6899
easycare cotton. magnesium chloride catalyst. structural aspects 6142
effects of softeners, flame retardant, silicone emulsion, and crease resistant finish on reactive and vat dyed grounds 1969
Eighth Forum for Process Technology in Textile Finishing. importance of overall textile appearance 7242
elastane fibers, thermomechanical properties studied to control elasticity 4044
electron beam curing and applications in finishing. German research institutes 2798
emissions, smoke from textile finishing operations eliminated by tubular electrostatic precipitator 751
energy conservation, effluent treatment and control in modern

processing operations 6819
equipment and processes for dyeing and finishing at [1987] ITMA 3559
expert systems 4396
Fab Industries' [fall 1988] sleepwear line treated with 3M Scotchguard Stain Release. capabilities 1302
fabric defects in finishing. troubleshooting 1970
fabrics, industrial. developments 327
Fastran Cooldry. radio frequency drying for wet finishing sector 6812
finishing on the LZO-2000 line for cotton, cotton blend fabrics 4490
finishing processes and materials for chemical fibers in spinning 8136
finishing. application with concern for cost effectiveness and quality 3568
finishing. KBU system controls drying, sizing, chemical concentrations 5162
fixatives, effect on direct dyes for cotton fabrics 5229
flameproofing. chemicals, methods 1963
Fleissner. nonwovens, wool, carpets, and woven and knitted fabrics 1899
fluorescent brighteners. properties and applications in textile finishing and plastics 4419
fluorochemical treatment for superior barrier properties 4281
foam application of durable press and fluorochemical finishes to cotton fabric 6147
foam produced in rotor-stator mixers. bubble size distribution and energy dissipation studied 1182
foams for soft finishes 6816
French textile finishing. development over last twenty years. future 6813
future. automation and new technologies. tenth SVCC symposium 5216
garment dyeing. NCSU conference report 1206
garment. feasibility as a plant operation 6124
Gellair process for finishing heavyweight denim from Burlington Industries and Cotton Incorporated 2706
German finishing industry and technical textiles. increase in market share 6814
guide to recent advances in textile wet processing 6817
heat cure process for cotton fabric 4495
heat setting. alternatives to tenter heat setting 6160
hydraulic unit with automatic splicer for joining fabrics at full production speeds 3560
hygrothermic finishing. structural padding systems 1903
ICS-Texicon's Autofoam system for applying flame retardant surfaces to fabrics 6139
industry [April 1983-April 1986]. United Kingdom. status 3561
Integrated Color Network from Datacolor. quality control for finishing industry 4390
introductory course to textiles and textile technology 7258
ITMA exhibitions. future technological activity 5167
ITMA [1987]. computers, yarn packaging, dyehouse metering, and tenter productivity 4408
ITMA [1987]. developments in new processes 5587
ITMA [1987]. innovations in finishing. higher sophistication, increased cost 6082
jeans. resurgence in consumer demand due to new finishing techniques 1374
Kiss-Roll or Triatex MA system. application in India 6084
knit and woven cotton, preparation for printing 385
knit fabrics. cost accounting 8766
liquid heater for hot baths. role of steam 6080
low temperature heatsetting of polyester/wool and polyester/viscose fabrics. results, crease recovery, shrinkage 1985
low wet pick-up. vacuum extraction. India. industrial applications 6818
low wet pickup technology for finishing. applicators, coating systems 389
machinery, data sampling. techniques and hardware 4718
management. dynamic controlling method, goal-setting 705
mechanical finishing machinery at ITMA [1987]. consolidation and control instead of innovation 3673
mercerization. physical, chemical and mechanical processes 1911
mercerizing. wetting agents. overcome difficulty especially in gray 4412
methyl cellulose combined with crosslinking agent on cotton printcloth for restricting migration during drying 7646
micellar solutions to apply Hercosett resin and hydrogen peroxide to wool 8547
microbiology test methods 1464
microencapsulation for hygienic, odoriferous, and fire warning applications 6148
microencapsulation 5169
modal, cotton, and viscose fabrics. microstructure 5113
model, based on filtration, liquid filling during impregnation 5307
narrow fabric. machines at [1987] ITMA 2707
nonwoven flocking, electric field, method, finishing 5329
nonwoven webs. calender roll function 3503
nonwovens and knit fabric finishing in the face of modern market demands 3552
optical fabric inspection. Forum for Textile Finishing Processing Technology 6092
Perrustol Ave. nonionic antistat from Rudolf for wool and manmade fibers 5175
pleats 7559
polyester crepe. treatment by caustic hydrolysis 3665
polyester fabric. antimicrobial finishing 3655
polyester fabrics. plasma treatment for continuous finishing 5332
polyester fabrics. wet processing developments 8434
polyester textured woven and knitted fabrics. processing sequence 6820
polyester woven fabric finishing using alkaline hydrolysis with catalysts 476
polyester yarn. study of optimum finish level 951
polyethylene glycol bound to cotton and cotton polyester blends imparts temperature adaptable properties 477
polymerization reactions induced by electron radiation 8443
polymers, reactive high. chemical and mechanical properties 5179
polyurethane based resins for new finishing effects. research by ROL 6149
polyurethanes 478
principles of foam production and operations 1973
printing technique, new 5275
pumice stones for stonewash and acid wash finishes 1263
quality control procedures for textile finishers. end product orientation 3082
quality maintenance program for wet processing 1184
quality testing in New Zealand for water supplying CHEMSET machines 8743
quaternary ammonium compounds in wet processing 7552
radiation induced modification of polymer solutions. applications in textile finishing 4491 4492
Ramzay finishing agent from Shikibo for preventing itchiness of polyester/ramie blends 2790
raw cotton. dyeing and finishing simultaneously 1900
reactive polymers 3661
research laboratory operated by Cotton Incorporated 2204
resin finishing. yarns 6943
resin. wet-in-wet as an alternative to dry-in-wet. samples studied show better properties, energy savings 4493
rotary printing. finish-conditioned surface effects 4471
Schaeffer produces software to upgrade production, processing, and stock flow in textile finishing industry 5502
silk and silk/rayon fabrics with blended resins 7647
silk. modifying finishing processes to make fabric washable 2078
singeing, scouring, bleaching, and mercerizing machinery displayed at [1987] ITMA 1909
sizing in linen. new product based on Y-tack 60L. properties and use 7404
Softal manufactures machines for electrical surface treatment of paper, metals, and plastics to improve adhesion 6815
Soviet weaving mill fabrics composed of manmade silk filament

yarns 5156
Sperotto Rimar scouring, calendering, carbonization methods and machinery 383
spin finishes for cotton. effect on processing performance of weathered fibers 2456
statistically designed experiments for textile wet processing 7046
steam tunnels 1301
steps to obtain quality finish on carpeting 5955
stone and acid washing techniques at Levi Strauss (Canada). improved heat recovery, reduced production times 4494
Stone-Eze. chemical process developed by Ecolab to replace stone-washing 7638
stonewashing. selecting the proper stones and supplier 8571
Stork. Total Systems Control integrated printing and finishing 6129
strength of adhesive bonds between impregnated latex and nonwovens, influencing factors 4483
succinic acid-bis-n-vinylsulfide-anilide. improves various properties of wool 3658
surfactants. range of uses in finishing processes 6389
Swiss Society of Chemists and Colorists. predicts future of industry 4395
system from Cotton Incorporated for wet processing of cotton in yarn or fiber stages 2504
taffeta. removing wrinkles at cleaners 2062
technical advances 7560
textile chemical processing. water management 8446
Textile Dyer & Printer textile dictionary 8965
textured polyester fabrics. defects caused during wet processing 6163
thermal adaptability. polymer coatings on fabrics. changes in cellulose after treatment 7642
treatment of cellulose fibers with N-methylate compound. new studies 6141
ultraviolet rays. action during finishing, response of cotton bleached cloth 1905
vacuum extraction technology 8435
value added by dyeing and finishing techniques 4457
Video Shrink Inspector manufactured by Sick Optik-Electronik. measures fabric shrinkage after processing 7076
viscose woven fabrics. treatment with DMDHEU. effect on physico-mechanical properties 4496
waste water from, ozone and radiation to acidify for reuse 4764
water, thermal, electrical energy consumption in finishing industry, Poland 386
weft velvet. finishing to produce high quality fabric 4296
West German industry analysis [1987]. poor performance 3976
West German textile finishing industry conference. [1987] Cologne 6832
wet finishing ranges, automation 455
wet on wet processing improves natural fabric quality and reduces energy consumption 6083
wet processing jeans by commercial laundries 2063
wet processing of raw materials 2718
wet processing. electronics in control and automation 8437
wet processing. gray preparation and post gray preparation. quality control measures 1515
wet processing. strategies to reduce pollution sources and improve costs and quality 3959
wet processing. technical advances 8436
wet-in-wet resin finishing 2791
wool processing steps. shearing to finishing 7402
wool. continuous finishing lines from Fleissner 1898
wool. new treatments. preprint, shrinkproofing, dyeing 2708
wool. problems with mothproofing agents. Flucofenon and Sulcofenon used as substitutes 3663
wool. solvent pretreatment. effect on shrinkproofing and dye uptake 2709
yard goods finishing. problems, solutions at [1987] ITMA 6086

FINISHING--KNITGOODS AND HOSIERY (SEE ALSO OTHER HEADINGS, SUCH AS FABRIC HANDLING EQUIPMENT, FINISHING MACHINERY)

Benninger Dimensa mercerizing range combines chemical and chainless processes in one machine 3572
continuous processes. washing, dyeing, bleaching, drying 7561
dyeing, pad. tubular knits. tube break edge marking 6108
fabric dryer for tubular knits. Pegdry 800 series 8566
fulling and friction effects. padding processes 8572
hydrogenation of fluorosludge from knit fabric finishing 761
ITMA [1987]. finishing machinery for knitgoods 5180
ITMA [1987]. knitgoods finishing machinery 6093
ITMA [1987]. tubular knitgoods dyeing and drying machinery 6130
knitting machinery. trends in finishing. flat and foam 3563
nonwovens and knit fabric finishing in the face of modern market demands 3552
pad dyeing processes of tubular knitgoods 5252
pad dyer, Bicoflex. Ramisch-Kleinewefers 5245
raschel velours. finishing guidelines. preparation, cleaning, pre-shearing, polishing, heat setting 3674
residual shrinkage in knitwear caused by solvents. minimized with new drum machine 8431
shrinker, compressive. Toptex-W from Monforts 5328

FINISHING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS APPLICATORS, DYEING MACHINERY, FABRIC HANDLING EQUIPMENT, ROLLS, YARN PROCESSING, UNDER SUBJECT HEADINGS OF SPECIFIC FABRICS, SUCH AS CARPETS, PILE FABRICS, AND STRETCH FABRICS, AND UNDER SUBJECT HEADINGS OF SPECIFIC FINISHING PROCESSES)

advances in fully automated steam-air garment former for drycleaning and finishing machinery 6204
ATME-I [1988] in Greenville 5536
automated work room by Stork-Brabant for Laura Ashley. future projects 6848
automation of batch dyeing and printing machines 1948
auxiliary equipment. guiding cloth and weft straighteners shown at ITMA [1987] exhibition 7551
B. F. Perkins. product specifications for various units 1525
batch dyeing. advances 1933
Benninger Dimensa mercerizing range combines chemical and chainless processes in one machine 3572
Bicoflex padder manufactured by Ramisch Kleinewefers 8438
Blue-Jay 1000 Stoneless stone wash and 2000 Stoneless acid wash systems from Pennwalt 2789
BUDA-FLAX. modernization of spinning, weaving, and finishing machinery 3872
buyer's guide for wet processing controls from American Dyestuff Reporter 1219
calenders, Ramisch Kleinewefers' Nipco 5317
carpet tile finishing range from Fleissner combines steaming, washing, and drying 3648
carpet, automated process from Fleissner. finishing line for printed tile and computer controlled dye liquor applicator 4389
carpet. coating and printing machinery at ITMA [1987] 4392
Chemset. setting machine for wet processing yarns. from WRONZ 6940
circular knitted fabrics with tubular construction 2712
coating with the BE8 contact finisher (Polmatex-Cenaro). tests with cotton, cotton/polyester fabrics 4480
compressive shrinkage system, fabric embossing, calendering system for fabric finishing 6959
computer and microprocessor advances in dyeing and finishing machinery 6855
conference, West German Dyer's [1988] 6830
Corino's Normatex weft straightener with pin wheels 7652
cotton, flax, blend woven fabrics, LZO production lines for finishing 5172
decating. Conditec Superfinish-2 from Johannes Menschner 6949
denim, wet finishing process. stonewashing, acid washing, overdyeing 1181
Desmond and Sons purpose-built denim processing plant. Washex 48/40 stone washing machines 4481
Detexomat machines for women's hosiery. modular system units

5903
developments displayed at ITMA [1987] Paris reviewed. process control, automation 1183
Dimensa mercerizing machine from Benninger. dimensional stability of fabrics processed on machine 5182
Dimensa mercerizing machine from Benninger. impregnation with hot lye 5181
directory of international manufacturers 5164
Dornier mercerizing machinery 2725
drying system, THD high frequency. automatic transport. Thies 5321
energy and cost saving in old and new wet finishing equipment 3138
energy conservation, effluent treatment and control in modern processing operations 6819
equipment and processes for dyeing and finishing at [1987] ITMA 3559
EVAC's Ultra Knit Family of knit tensionless processing machines 3676
exhibits ITMA [1987]. dyeing and finishing machinery 1238
Fabri-Zone steam finishing process by Fabri-Zone International for carpet fibers 4505
finishing equipment and accessories exhibited at [1987] ITMA 7557
finishing on the LZO-2000 line for cotton, cotton blend fabrics 4490
Fleissner. nonwovens, wool, carpets, and woven and knitted fabrics 1899
Fleissner. steam flow washer and dryer, dye take-up unit, Colormat dye kitchen 5276
future trends exhibited at ITMA [1987]. automation, CAM 7556
gas fired liquid heating systems in dyeing operations. benefits of use 5528
German. glossary for finishing machinery 7935
Haug ionization systems to discharge static electricity during finishing 5165
heat setting. alternatives to tenter heat setting 6160
ITMA [1987] dyeing and finishing machinery reviewed 1901
ITMA [1987] exhibit profile of featured machinery 4788
ITMA [1987] highlights in wet processing. advanced technology, developments 4393
ITMA [1987] overview of recent innovations 4397
ITMA [1987]. automation and optimum reproducibility in finishing and dyeing equipment 2711
ITMA [1987]. automation, dyeing machines for knit fabrics, and process controllers 3562
ITMA [1987]. batch dyeing and finishing equipment emission control 4398
ITMA [1987]. detailed survey 5593
ITMA [1987]. developments in preparation and finishing systems 1971
ITMA [1987]. developments 381
ITMA [1987]. equipment for drying, padding, washing, and tentering 5171
ITMA [1987]. German manufacturers' success in integrating process control 3556
ITMA [1987]. innovations in wet processing machinery. application of process control 6821
ITMA [1987]. knitgoods finishing, dyeing machinery 5180
ITMA [1987]. knitgoods 6093
ITMA [1987]. pretreatment systems 4409
ITMA [1987]. preview. technical information 7898
ITMA [1987]. process optimization in finishing equipment computerization 4399
ITMA [1987]. raising, shrinking, shearing, steaming, pressing, and inspection 5170
ITMA [1987]. wet processing machinery 1237
ITMA. non-stop pattern changing, speedier engraving 2710
J. Menschner Maschinenfabrik Contipress for wool and synthetic fabrics 2799
Kiss-Roll or Triatex MA system. application in India 6084
knitgoods piece dyeing, shrinking, rolling, separating. improvements 4387
knitting machinery. trends in finishing. flat and foam 3563
L. J. Specialties distributes Japanese dyes and equipment 3555
machinery at Klopman's works in Frosinone 5538
mechanical finishing machinery at ITMA [1987]. consolidation and control instead of innovation 3673
Microcreper creping machine from Micrex 8573
Model EXP 146 extraction and impregnating machine for tubular knit fabrics manufactured by Heliot 8439
pad. Bicoflex from Ramisch-Kleinewefers 5245
Pegdry conveyor air jet drying and relaxation finishing machine for tubular knit fabrics 5320
Polmatex-Cenaro's (Poland) BE8 contact finisher, uses, design 4503
polyester fabric. improving comfort properties 3575
polyester fabrics. plasma treatment for continuous finishing 5332
pretreatment range, computer controlled four-stage. Babcock 4410
rollers and roller coatings for the textile industry 4752
rolls. Kleinewefers Vari-Flex mid-fastened roll system, its operation with other rolls 8441
Serracant's tow dyeing, steaming, and milling/scouring units 6094
shearing and cleaning. Vollenweider Type PMD Super Duplo 8578
Shockstream from ASISA. continuous open-width processing of woven cellulose fabrics 7568
singeing, scouring, bleaching, and mercerizing machinery displayed at [1987] ITMA 1909
Sockpress C from Heliot. boarding machine for socks and half-hose 7659
solvent system, Antarsol. Antarco 6131
Sperotto Rimar scouring, calendering, carbonization methods and machinery 383
Sperotto Rimar. new solvent/water carbonizing range for wool 7569
state-of-the-art pressing and finishing equipment from Veit. automation 3721
steaming cabinet for finishing. Sussman's LS 2000-Tunnelfinisher 8580
stone and acid washing techniques at Levi Strauss (Canada). improved heat recovery, reduced production times 4494
Stork. Total Systems Control integrated printing and finishing 6129
Sucker and Mueller. continuous finishing line for pile fabrics 6958
Superba WP/FU steaming/shrinking machine for high bulk acrylic yarns 3678
temperature control system, Gossen's Pantatherm D4 4411
Thies' new developments. Synchron Dyeing Control, Multi-Product Injection, Combined Cooling-Rinsing system 2758
Tramatex SP 01 weft straightener with pin wheels from Bianco 7653
vacuum extraction technology 8435
velour and artificial fur fabric finishing machinery by Hergert 387
VH-Microdos dosing system, computer controlled, manufactured by Henriksen 8440
washer-extractors from Cherry Tree for stonewashing 1986
wet and dry finishing equipment at ITMA 2713
wet processing developments at ITMA [1987]. computerized process control 7565
wet-finishing machinery from Benninger equipped with alternating current drive to process stretch fabrics 5173
wool. continuous finishing lines from Fleissner 1898

FIRES, SEE FLAMMABILITY.

FISHING LINES, SEE CORDAGE.

FISH NETS, SEE FABRIC PRODUCTS.

FIXATION OF DYES, SEE UNDER SUBJECT HEADINGS OF DYEING, PRINTING, STEAMING.

FIXING, SEE SETTING.

FIREPROOFING, SEE FLAMEPROOFING.

FLAMEPROOFING (SEE ALSO OTHER HEADINGS, SUCH AS

APPAREL, CARPETS, CONSUMER ATTITUDES, HOME FURNISHINGS, LEGISLATION)
aramid heat resistant material for fireproof clothing from Teijin 6031
contract furnishing prints on flame retardant Trevira CS twill weave. new range 2695
FA/S spark eliminator from Jossi built into the flock conveyor line for spinning plants 3345
fabrics, industrial. status of fire retardancy 327
fabrics. citations from [January 1975-July 1987] World Textile Abstracts 8968
finishes and fireproof fibers compared for performance and cost 6032
finishing, flame retardant. various agents. textile burning behavior. ignition mechanisms 7648
fire resistant cargo liners for commercial aircraft. FAA regulations 4347
fire resistant protective clothing. overview 7735
firefighters' protective clothing fabrics. durability to heat and light 2658
flame retardant cellulosic fabrics. new invention for dyeing these fabrics 7590
flame retardant Viscose FR fiber from Lenzing 98
future. developments. textile science and engineering 6029
glove, fireman's 6239
heat cure for cotton fabrics based on phosphonium precondensate and urea 479
heat cure process for cotton fabric 4495
Hoechst Celanese produces polyetherimide filaments for heat and fire resistant composites 5630
ICS-Texicon's Autofoam system for applying flame retardant surfaces to fabrics 6139
Japanese flame retardant fibers and fabrics, end uses. treatment of polyester and cotton for flame retardant fabrics 3529
latex/phosphorus finish for viscose, viscose/acrylic, flameproofing properties 6938
modacrylic fibers. pigmented and flame retardant 480
N-methylol melamine resin with inorganic salts and silicone resins to impart flame, water and rot resistance 1258
nonwovens. coating for flame retardancy 1042
nylon 6 fire resistant fibers. preparation by synergistic system of combustion retarders 8093
Panotex fire resistant and high temperature resistant fabrics. applications, composition, properties, sample swatches 3524
polyester. polymethacrylic acid 6523
polyurethane foam, attempts to make safe, flameproof 3804
product liability legislation in EEC regarding flame retardant fabrics 3835
Pyrovatex CP flame retardant treatment from Japan for cotton and aramid cotton blends. technology 1972
Snia Fiber's Velicren FR. production methods and characteristics 6505
standards. test methods. legal regulations 691
testing of home textiles at EMPA St. Gallen 692
testing of home textiles. definition of combustibility and smoke production 693
Tris-BP reported as a potential hazard. dermatological effects of treated fabrics. cellulosic fabrics 6941

FLAMEPROOFING AGENTS
ammonium salt containing flame retardants. effect on discoloration of red azo dye 3590
chemicals and treatments of highly flammable fibers 1963
cutting systems improved by computer program to calculate fabric dimensions 4544
direct, azoic dyed materials affected by DMDHEU resin, softeners, silicone emulsions, flame retardant, other finishing agents 1251
fabrics. citations from [January 1975-July 1987] World Textile Abstracts 8968
finishes and fireproof fibers compared for performance and cost 6032
finishing, flame retardant. various agents. textile burning behavior. ignition mechanisms 7648
flame retardants. buyers' guide 1904
heat cure for cotton fabrics based on phosphonium precondensate and urea 479
Japanese flame retardant fibers and fabrics, end uses. treatment of polyester and cotton for flame retardant fabrics 3529
latex/phosphorus finish for viscose, viscose/acrylic, flameproofing properties 6938
Panotex fire resistant and high temperature resistant fabrics. applications, composition, properties, sample swatches 3524
Pyrovatex CP flame retardant treatment from Japan for cotton and aramid cotton blends. technology 1972
tetrabromidephthalic anhydride, resistant to washing, drycleaning, uses 5301

FLAMMABILITY (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL, CARPETS, CONSUMER ATTITUDES, HEALTHCARE AND MEDICAL TEXTILES, HOME FURNISHINGS, LEGISLATION)
aircraft firewall fabric. lightweight construction 2674
airline cabin furnishings made of new fiberglass-CFRP. advantages. regulations limiting heat release 7756
apparel, children's sleepwear. cotton articles sold to avoid flammability regulations 5409
apparel. characteristics. testing and test methods. sixty different fabrics 4361
British and international standards 1544
carpet test comparison between NBS and ISO 5657 methods 8734
carpets. radiant panel smoke emission tests 8705
Consumer Product Safety Commission, port inspection program. children's apparel imported illegally as sleepwear 5419
controls, testing equipment, instruments. recent developments 2715
cotton and flax fabric backings of Kapron, Lavsan and wool fabrics 322
cotton fabrics. properties analyzed by thermogravimetric analysis 1835
cotton industry. critical standards of quality 3209
Courtaulds Inidex polyacrylate fire protective fiber. properties 2445
customs crackdown on imported illegal children's sleepwear, violation of federal flammability standards 6400
discontinuous organic fiber mixture and fabrics made from them. heat resistance 7205
electrostatic problems with hospital bedding. shock and fabric flammability 2669
fabrics for airplanes, fire retardant. FAA regulations 6776
fabrics, fire resistant, from Great Britain. glass fiber fabrics, carbon fiber material, ceramic fiber blankets 2459
fabrics. citations from [January 1975-July 1987] World Textile Abstracts 8968
fiber barriers for heat and fire resistance of textured glass fabrics, coated glass fibers, ceramic filaments, and carbon fibers 1656
Fibersil. woven ceramic textile containing alumino-silicate fibers with noncombustible properties 5991
finishing, flame retardant. various agents. textile burning behavior. ignition mechanisms 7648
fire resistant fibers from Rhone-Poulenc. Kermel, Clevyl, and Rhovyl 2450
fire resistant protective clothing. overview 7735
fire retardant fibers from EniChem and Rhone-Poulenc 1657
flame retardant aramid fibers from Teijin 8021
floor coverings and minimum fire resistance standards by the German government 2177
Glen Raven's Sef-Plus flame retardant fabric for firemen and industrial workers 6735
heat reflective fabric with aluminized face. Reflespace. France 8401
Hoechst Celanese PBI. flameproofing characteristics 5686
Ibena's range of protective fabrics 1849
ignition temperature of cotton and polyester/cotton blends at 950 degrees Fahrenheit 5132
Kynol novoloid fiber. flame resistant. non-melting. non-toxic 8091
lightweight fire blocking material used in aircraft. from Teikoku Sen-I Company 8402

meta-type aramids. heat and flame resistance and applications 6497
microencapsulation for hygienic, odoriferous, and fire warning applications 6148
modacrylic flame resistant fiber. Lufnen from Kanebo 8090
natural fibers. chemical treatments 1963
New York State code. product liability. building code compliance 7251
Nightwear and Fire conference at Shirley Institute 1542
Philene. phenolic fiber which is permanently flame-resistant 8080
polyacrylate fiber from Courtaulds, Inidex 865
polyacrylonitrile fibers treated with stannous chloride. enhanced flame retardancy 1254
polychlal flame retardant synthetic fiber. Cordelan from Kohjin 8084
polyurethane foam. question of banning because of flammability 3804
PPS, PEEK, PEI fibers from Teijin 8088
protective clothing. information for industrial launderer. maintenance for high temperature resistance uniforms 2077
regulations controlling fabric use. growth of applications 6384
regulations. impact on upholstered furniture 1427
Rhoburn flammability tester from James H. Heal & Company 3831
roving, PAT-M/300 core spun, for flame retardant PVC conveyor tapes 2200
specialty fire blocking fabrics from TBA Industrial Products for aircraft seats 1850
standards in Australia and children's sleepwear 5421
standards. need to upgrade to make testing results more relevant 8719
test methods, small scale, coated fabrics 3058
Tosco Dia NF flame retardant fabric 8376
Trevira CS polyester fiber and flame retardant copolymers 8052
unsaturated polyester resins and laminates. reduction of optical density of smoke during burning 3961
upholstery and British standards, fabric requirements 6261
Vertex glass fabrics. performance and evaluation 4345

FLAX (SEE ALSO OTHER HEADINGS, SUCH AS DEGUMMING)
bleaching with oxygenated water and ultraviolet radiation 3566
chemical modification in polyester blend fabrics 5152
China to boost production of linen fabrics and chemical fibers. new facilities 6413
cold sizing of linen. new product based on Y-tack 60L. properties and use 7404
crystalline ultrastructure studied using diffraction contrast transmission electron microscopy 6467
dry spinning machinery. innovations shown at ITMA [1987] exhibition 7373
flax fiber emulsification system, spinning preparation 4088
flax rotor spun weft yarn breakage on the STB loom due to weft mechanism 215
friction regulator, control straw layer unevenness, density 4089
hand spinning commercial flax via worsted spinning and the long draw 7374
linen industry profile. structure. growth. markets 8228
linen. effects of heat-induced aging on color, tensile, abrasion, dyeability 7476
Linens Limited hand washes and repairs fine linens 3032
modifying the MAV-L-KM-206 rapier loom to weave flax fabrics 205
new apparel fabrics [1987/1988], jacquard designs 5011
Polish industry economic analysis, profit margins 4007
Premiere Vision fabric show, trends in worsteds and linens from European weavers 2698
production. optimum climatic conditions 1610
Shikibo's Ramzey linen without naps and minus the prickly finish. special processing techniques 1626
Soviet [1987], woven flax fabrics 323
spinning of flax tow on cotton and worsted system technologies 3337
toxicity experiments on dust compared to cotton 8864
waste removal with air jet during sorting and pressing 4914
wool and flax woven apparel fabrics, deformation during steaming, effects, tests 4358
world production, export and price. Soviet Union leads production, Belgium leads prices 3229

FLAX SYSTEM PROCESSING
friction regulator, control straw layer unevenness, density 4089
waste removal with air jet, mathematical model, parameters 4914

FLOCKED FABRICS (SEE ALSO OTHER HEADINGS, SUCH AS HOME FURNISHINGS)
computerized testing flocked nonwovens' strength, influences in model 5120
methods and materials used. future developments 3675
Steen, Schwarzenbek's Saff superabsorbent polysodiumacrylate flock used in hygienic nonwovens, properties 1718

FLOCKING (SEE ALSO OTHER HEADINGS, SUCH AS ADHESIVES, PRINTING)
antistatization for optimal flock deposition 1987
electrostatic. method and future developments 3675
formulas for pile orientation, flocking from underneath, higher pile density 4272
nonwoven flocking, electric field, method, finishing 5329
substrateless production of nonwovens. applications 3502
West Germany, postwar textile developments. VTCC fortieth birthday 6419

FLOCKING MACHINERY

FLOOR COVERINGS, SEE CARPETS.

FLUID JETS, SEE CRIMPING MACHINERY, MANMADE FIBER EXTRUSION.

FLUOROCARBON FIBERS

FLY, SEE DUST, ENVIRONMENT, WASTE--FIBROUS.

FOAM LAMINATES, SEE CARPET BACKINGS AND BACKCOATINGS, LAMINATED FABRICS.

FOAMS (SEE ALSO OTHER HEADINGS, SUCH AS CARPET BACKINGS AND BACKCOATINGS, LAMINATED FABRICS, LEATHER SUBSTITUTES)
acrylic binders in foam coating 6152
application in acid dyeing of woolen fabrics and effect on dyeing properties 8495
Czechoslovakian tests and methods on foam finishing. coating, carbonization, waterproofing 4394
defoamer, FZ-890 organosilicon. ingredients and applications 388
dyeing. stability of foam at different blow ratios and concentrations of stabilized salt, alkali 456
garment dyeing with Sandoz Sancowad process using foams. reduced liquor ratio 3618
low wet pickup technology for finishing. applicators, coating systems 389
open-cell and closed-cell foams for marine cushions. differences and general preference 4362
pigment printing pastes for cotton, cotton/polyester woven fabrics 4478
polyurethane and coating applications. production 7660
polyurethane developments. properties 1684
polyvinyl chloride, flexible with closed pores 1851
production and application changes during printing 7576
production, basic operations 1973
reactive water soluble polyurethane. synthesis and applications 481
silicone-rubber foam. RTF 762 for high performance composite fabrics 8548
sizing agents. foamability and viscosity study 8240
soft finishing techniques 6816
Stork Brabant Rotary Screen Foam minimum application printing

system 3649
synergism in foaming. binary mixtures of surfactants 4402
Textile Research Institute studies on flow of foams through fibrous materials 6085
warp sheets sized with foams 3414

FOOTWEAR, SEE APPAREL, LEATHER SUBSTITUTES.

FORECASTING, SEE OPERATIONS RESEARCH, SIMULATION.

FORECASTS (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL, FABRICS, FASHION, KNITTING INDUSTRY, NYLON FIBERS, OPERATIONS RESEARCH, SIMULATION, STATISTICAL METHODS, TEXTILE INDUSTRY, TEXTILE TRADE)
additives. market growth forecast in Europe due to increased demand for natural fibers 6809
American Intimate Apparel [1988] expectations 1352
carpet industry, report from Du Pont's Canada Carpet Fibers Group, predictions [1988] market 5434
China, Soviet Union, and United States. [1988, 1989] price and production predictions 2412
Chinese textile industry, significant growth predicted 8953
Color Marketing Group, future popular colors in home furnishings predicted 6098
colors and designs [spring, summer 1989] in home textiles. J. P. Stevens' predictions 3010
cotton's market share grows for men's wear. production, consumption forecasts by Cotton Incorporated's president 4814
dye industry will be changed by automation, higher disposable incomes, and information technology 409
dyes manufactured in Japan in [1987]. some recovery predicted 8515
fabric trends in [fall/winter 1989/1990] fashions 7668
fabrics [spring 1989] women's wear 2969
fabrics, upholstery [1988]. colors 1426
factoring business [1987-1988] for Southwest. modest growth expected 2009
fiber industry, Wall Street expects continued moderate growth [1988] even though apparel demand has fallen 4802
finishing industry. Swiss Society of Chemists and Colorists 4395
industrial fabrics. growth predicted for United States market 3404
industry ATMI economist makes grim prediction for future 5475
industry trends [to year 2000]. purchasing, raw materials, production technology 2395
Laundering. fictional vision of industrial operations in the next century 7714
legwear and bodywear manufacturers' expectations [1988]. industry outlook, concerns, trends 2121
manufacturing and marketing patterns [1960-2000]. history and predictions 5581
market for advanced composite materials. report from FIND/SVP 4338
Midwest Christmas season and outlook [1988], retailers in good position 2148
neckwear market during holiday retail season and for [1988]. company lines and expectations 1324
nonwoven fabrics. future technological and developmental trends for five to ten years 1165
nonwovens. directions for the industry and its future 5822
Pakistani cotton industry 6402
production and consumption of cotton 8941
spinning, short staple. year [2000] 5777
stock market crash [October 1987], effect on United States textile and apparel industries 2381
textile finishing, French. uses for natural gas. future development 5813
textile industry. [1988] economy 1559
textile printing, world trends 5287
United States clothing consumption. effect of economy. process 5586
United States production of mohair [1988]. reasons behind increase 1615
United States textile industry [1988] performance predicted. imports, consumer 2357
weaving mills. predictions for the future 3452
West Coast factors. [1988] outlook for manufacturers and importers 2007
wet processing. future technological activity based on ITMA 5167
wools position in knitwear market 1389
world consumption of laminates for production of printed circuits used in electronics industry 3881
world textiles. Financial Times International Conference. cotton, synthetic, wool, luxury fabrics 699
worldwide textile consumption. Financial Times Conference, paper 2238

FORTREL IS A POLYESTER FIBER.

FRICTION (SEE ALSO OTHER HEADINGS, SUCH AS CHEMICAL AIDS TO PROCESSING, LUBRICATION)
aluminoborosilicate glass fibers and other single filament fibers used in thermal protection systems. sliding friction behavior 7320
asbestos-free friction facings. evaporating solvent avoided 8339
CBN grinding wheels 6373
coefficient of friction between yarns and contact surfaces 4140
cotton yarn resistance along the back rest, lam, and heddles on the ATPR rapier loom 5029
diskette nonwoven liner fabric/magnetic media dynamic contact in floppy disk 7541
elimination of sizing. alternative preparations to reduce friction in spinning 3341
floppy disks. role of liner fabrics in controlling diskette torque, fibrous wiping of media, diskette durability 7543
friction spun yarns, Dref III. equivalent machine twist 4944
friction. parameters for thread passing through linear and radial areas of friction. model 4141
iron/graphite powders to reduce machinery friction, tests, suitability 745
manmade fibers. spin finishing. finishing agents. static control 6504
model of damage caused by friction to cotton thread in various environments 4660
nonwoven lining of magnetic media diskette jackets and magnetic media 7316
open end friction spun yarns. analysis of twist 4945
polyamide-imide and polyphenylene sulfide reinforced with short carbon fibers. wear rates and friction mechanisms 6543
polymer composites. sliding and abrasive wear 7825
rotor spinning. fiber friction levels studied, data used to develop lubricants 4935
spin finishes. friction reduction. antistatic agents. stabilizing agent 7319
static and dynamic frictional behavior of DREF, air jet, and ring spun yarn 5813
synthetic fibers. frictional coefficient and hydrodynamic lubrication 103
tribosensing used to test nonwovens 7816
viscose yarn. soft paraffin treatment effects 4965
warp insertion and compound needle in knitting machinery 6697
waxing cotton and Terocel warps with surfactants to reduce friction 3418
weaving, size composition in relation to adhesive force 1768
yarn tensions in friction spinning 4109
yarns. effects on wool, cotton, nylon. parameters for speed and tension 4145
yarns. static and kinetic friction. measurement method 3047

FRINGES, SEE FASTENERS AND TRIMMINGS.

FUGITIVE TINTING

FULLING (SEE ALSO OTHER HEADINGS, SUCH AS FELT, SHRINKAGE)
padding processes, parameters 8572

rub felting. wool. effects of tension 1264
singles and two fold woolen carpet yarns. twist effect on rub felting process 1259

FUNGICIDES (SEE ALSO OTHER HEADINGS, SUCH AS ANTIBACTERIALS AGENTS, ROTPROOFING)
Aspergillus niger study on cotton fabric. effectiveness of mildewcide 6214
octhilinone for mildew control on cotton sheets 5402
silk fabrics, yarn dyed. protection from fungus 6942

FURS (SEE ALSO OTHER HEADINGS, SUCH AS HAIR FIBERS, MOHAIR, PILE FABRICS, WOOL)
artificial. finishing concentrations determined by fibers used as the base 5326
artificial. LLMA-M nairite modified to form bond with split's collagen and sheep fleece's keratin 5095
British withdraw proposal to label all furs caught in leghold traps 5566
Christy. English manufacturer of felt hats made from rabbit fur, profiled 2133
drycleaning precautions and procedures for hair and fur fibers 7001
simulated furs. care of new materials 324
Wildman Jacquard's NR knitters, artificial fur knitting 4248

FUSIBLE INTERLININGS, SEE FABRIC PRODUCTS, FUSING, HOME FURNISHINGS.

FUSING (SEE ALSO OTHER HEADINGS, SUCH AS MOLDING, SEAMING)
BIMA [1988] Conference, proposed draft code of practice for fabric/interlining relationships 4986
British Interlining Manufacturers Association, draft code of practice. compatibility between interlining and outer cloth 5133
damage to apparel. restoration procedures for blistered fusible interlining after drycleaning 4589
equipment from Kannegiesser France and Freudenburg, thermobonding presses and nonwoven fabric machinery 2623
F. Calemard's ultrasonic equipment for fusing, cutting, and laminating 5392
knitwear and nonwoven interfacings 4376
Kufner Double Spot Coating System for fusing difficult outer fabrics 547
limpness in Ultrasuede garments, effects of wear and cleaning on the fabric and separation of fusible interfacing 3737
rollpadded lapel and its re-emergence as quality symbol. KA roll padding machine 3710
suppliers and products at [1987] Bobbin Show 526
tailored clothing industry benefits from innovations in fusing and pressing. review of developments 1287

GARMENTS, SEE APPAREL.

GAS FADING, SEE COLORFASTNESS.

GEAR CRIMPING, SEE CRIMPING.

GEOTEXTILES, SEE INDUSTRIAL FABRICS.

GERMICIDES, SEE ANTIBACTERIAL AGENTS.

GERMPROOFING (SEE ALSO OTHER HEADINGS, SUCH AS ANTIBACTERIAL AGENTS, DRYCLEANING, HEALTHCARE AND MEDICAL TEXTILES, INDUSTRIAL HEALTH AND SAFETY, LAUNDERING)
Carrington antistatic and antibacterial fabrics for hospital garments. components, features, laundering 2668
Persistol E/8-oxyquinolinate copper, germ, waterproofing 5302
polyurethane foam use in furniture industry, debate over use because of fire hazards 3804

GILLING (SEE ALSO OTHER HEADINGS, SUCH AS COMBING)

GILLING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS COMBING MACHINERY)
Model ISV intersecting gillbox head 8160
Schlumberger's GV 10 rapid vertical gill-box 8145
sliver drafting in gill box. measurement of drafting force 8159

GINNING, SEE COTTON GINNING.

GLASS FABRICS (SEE ALSO OTHER HEADINGS, SUCH AS COMPOSITES--GLASS FIBER REINFORCED, LAMINATES)
airline cabin furnishings made of new fiberglass-CFRP. advantages. regulations limiting heat release 7756
compression resistance, relation of knitting method to strength 6788
cutting. Aqua Jet water jet that cuts through Kevlar 6187
Fibersil. woven ceramic textile containing alumino-silicate fibers with noncombustible properties 5991
fire resistant, from Great Britain 2459
glass/polymer shoe insole fabrics, tests for suitability, properties 4355
Nitto Boseki designs bonded glass fabric for printed circuit boards 6764
nonwovens with glass fibers. production 5978
oxygen atom interaction with materials. materials exposed to low Earth orbit space environment 7359
protective clothing, welding mats produced with sheet laminates and other fibers 4833
protective, heat. Hellhake's High-Therm and High-Temp 5127
Springs Industries' purchase of Uniglass and Marglass facilities for fiber glass fabrics from United Merchants and Manufacturers 3094
stress damage to glass fabrics during weaving on Saurer 100 WJ loom 4207
warping machinery. Barber-Colman's MPBG warper 5847
woven, coated synthetic resin finishes 1852

GLASS FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS COMPOSITES--GLASS FIBER REINFORCED, INORGANIC FIBERS, LAMINATES, OPTICAL FIBERS)
aluminoborosilicate glass fibers and other single filament fibers used in thermal protection systems. sliding friction behavior 7320
AS4 Graphite and E-Glass fibers in polyphenylene sulfide matrix 982
ceramic fiber from oxynitride glass from Shimadzu 2460
ceramic fibers. potential hazards, toxic effects 7309
composites, carded glass. design, structure, and properties 5959
cotton yarns reinforced with glass filament core. properties and applications 3530
E-glass fibers. surfaces modified by silane coupling agents 4049
Enka. silica fibers containing silicon dioxide for temperature resistant and nonconducting industrial textiles 5625
Fiberglas composite cable for prestressing concrete units 4344
flame retardant applications 762
heat and fire resistance of textured glass fabrics 1656
impregnation, ultrasonic. glass and carbon filaments 5810
inorganic polymer precursors 4050
microglass fibers from Bayer 8053
modified with inverse gas chromatographic methods. surface interaction with silanes 8107
multiaxial raschel knit fabrics reinforced with glass roving 5050
nonalkaline. manufacture and products 5663
nonwovens applications. growth outside military and aerospace markets 4282
nonwovens with glass fibers. production 5978
nuclear magnetic resonance. silicon and carbon 4655
orthopedic casting tape, knitted structure. combination of glass and elastic fibers 7468
polypropylene fibers reinforced with glass. fiber breakage during extrusion 5699
preliminary release of report on high performance fibers,

anticipated domestic demand and fiber pricing [by 1992] 3277
semiconductive glass fibers. General Electric 8054
silicon carbide and boron filaments made by chemical vapor deposition 7317
superconducting, high temperature fibers from organometallic precursors 8055
Tokai Carbon produces silicon carbide whiskers to reinforce ceramics 6506

GLASS YARNS
HercuFlex impregnated fiber glass yarns reinforcing coated fabrics. PPG Industries 8207
linear density testing for continuous filament glass yarns 3827
Mayer's ZM(Z)G warping system for high tenacity yarns 989
Owens-Corning glass fiber continuous filament yarns 4023
Raufil PVC-coated monofilament bundle yarns from Rehau 3660
warping high tenacity yarns. Mayer's ZM(Z)G warping system 5852

GLITTER IS A METALLIC YARN.

GOWNS, SEE APPAREL, APPAREL--UNDERWEAR, SURGICAL PRODUCTS.

GRADING, SEE INSPECTION, WOOL GRADING.

GRAFTING (SEE ALSO OTHER HEADINGS, SUCH AS CHEMICAL MODIFICATION, CROSSLINKING, RADIATION, TEXTILE NUCLEONICS)
acetate yarn. increased resistance. graft polymerization of acrylonitrile under gamma radiation 8010
acrylic acid onto fabrics of polyester fibers 4877
acrylic and methacrylic acids grafted on polyethylene terephthalate 1658
cationic additives grafted to cotton with crosslinking agents made fabrics dyeable with anionic dyes 380
composite structures and jute properties. grafted and chemically modified jutes. new markets 6469
copolymerization of acrylonitrile onto sisal fibers 7984
copolymerization of cotton yarn initiated with ammonium sulfate. tensile strength of yarn 49
copolymerization of polycaproamide and polymethacrylic acid 7312
cotton graft copolymers. hypochlorite oxidation 2223
disperse dyes and methacrylic acid grafted polypropylene fibers 3628
graft copolymers of polycaproamide and polydiethylaminoethyl methacrylate. optimum processing parameters 48
graft polymerization of vinyl monomers initiated by carbon black 5560
graft polymerization of viscose to cellulose during spinning. anion-exchange properties 99
interfacial electrical properties of grafted nylon 6 fibers 6527
nylon 6 fibers. graft polymerization 7321
plasma grafting of allylamine onto glass fibers 4348
radical induction for copolymeric grafting through radiation 3666
rayon grafted with acrylic acid. decrystallization studies 4040
silk fibers, methacryl amide-grafted. thermomechanical properties 1620
transfer printing behavior and fastness properties of acrylonitrile grafted nylon 6 fabrics 6928
vapor-phase and liquid-phase grafting to hollow-fiber membrane. effect on water permeability 3485
vinyl monomer binary mixtures for synthesizing cellulose graft copolymers 7314

GRAPHITE FIBERS, SEE CARBON FIBERS.

GRILEN IS A POLYESTER FIBER.

GRILON IS A NYLON 6 FIBER.

GRISUTEN IS A POLYESTER FIBER.

HACKLING, SEE BAST FIBERS.

HAIR FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS FURS, MOHAIR, WOOL)
angora. testing in an attempt to better quality and quantity of hair 6468
Australian goat fibers. status of crossbred grades 6470
cashgora, combination cashmere and angora. product characteristics and applications 30
cashmere and mohair 5614
cashmere and silk. drycleaning care procedures 6995
cashmere problems in China. contamination and lowered fiber availability 4818
cashmere, price rising in China. changing retailer's buying patterns. apparel products more costly 4008
Chilean angora rabbit and its European market 5613
comparative thermoanalytical and X-ray diffraction analyses of hair samples 2461
DNA identification of animal hair or wool samples 7998
drycleaning. discussion of basic fibers 2434
goat hair production in United Kingdom. cashmere, mohair, angora, and cashgora production 31
interlinings. friction spinning of DREF 3 yarns of goat hair, horsehair 4939
International Mohair Association. quality standards to determine market value 6471
Italian market for mohair, cashmere, angora, alpaca 6472
production levels, international overview of producers, properties of luxury hair fibers. alpaca, angora, cashmere, mohair, etc. 4009
rabbit hair fiber. morphology and chemical composition studied. properties 4819
rabbit. effect of milling and dyeing on rabbit hair sweaters 19
specialty hair and fur fibers, drycleaning precautions and procedures 7001

HARNESSES
Grobextra and Grobamtex Alfix harnesses from Grob 4180
Grobtex and Grobtra leno heddles manufactured by Grob 3447
heddle geometry. droppers. influence on warp tension 4216
heddle position. influence on stitches in woven fabric 1771
Mirobor manufactured by Grob. leno selvage device 3449
sixteen to twenty-four harness dobby. patterning possibilities in weaving 6650
weaving process and yarn stress, influence 217

HEALTH, SEE INDUSTRIAL HEALTH AND SAFETY, CONSUMER HEALTH AND SAFETY.

HEALTHCARE AND MEDICAL TEXTILES (SEE ALSO OTHER HEADINGS, SUCH AS ANTISTATIC FINISHING, APPAREL, APPAREL--UNDERWEAR, BLANKETS, CARCINOGENS, CARPETS, COMFORT, CONSUMER HEALTH AND SAFETY, DIAPERS, DISPOSABLES, DUST, EPITROPIC FIBERS, FABRICS, FLAMMABILITY, GERMPROOFING, HOSIERY, INDUSTRIAL HEALTH AND SAFETY, LAUNDERING, NONWOVEN FABRICS, PROTECTIVE CLOTHING, SANITARY NAPKINS AND TAMPONS, SURGICAL PRODUCTS, TOXICITY)
absorbable surgical articles. caprolactone and glycolide/lactide copolymers. new properties 7355
absorbency. coverstock materials for incontinence pads 6033
absorbency. distribution mechanisms 6073
Actipore modified acrylic fibers. controlled application of chemicals 8011
adult incontinent products and their market 2959
advertisements, information from suppliers of nonwovens machinery, raw materials, fabrics, and converting services 5148
air mattresses. British standard test method and body-mattress interface pressures 8741
amino-acid based fabric. Dinkam from Unitika 8362
antibacterial waddings for use in hospitals. Japanese polyester fiber impregnated with zeolite 7478

bacterial barrier properties of surgical drapes and gowns, face masks, instrument tray wraps 1106
bandage, self-adhesive. new production method from Braun KG eliminates disadvantages of coating 7757
bandage. adhesive. Sumiron HM-710. special solventless hot-melt process 7749
biotechnology. application to fiber and textile industries 769
burn dressings. advantages of nonwoven synthetic dressings 1107
calcium hydroxyapatite fiber for synthetic biological implants 8132
Carrington antistatic and antibacterial fabrics for hospital garments. components, features, laundering 2668
classification system according to production, fiber type, shape 5130
compresses. nonwovens. properties. effort toward new monograph for nonwoven textiles 1108
conference on nonwovens applications 1854
copolymer glycolide and trimethylene carbonate for sutures, bioabsorbable. easier knotting 8559
cotton and nonwovens compared when used in operating room drapes, surgical gowns 1109
deodorizing gauze packing. treated with phosphoric acid and cupric acetate 325
diapers, disposable and cloth. diaper rash 6034
Don and Low Dal-Tex. spunbonded nonwoven 5992
dressing. Moelnlycke's slow-release, zinc oxide-containing for open sores 7747
dressing. wound. from Absorbent Cotton Co. specifically for wound management and faster healing 7748
dressing. wound. Thoratec development with segmented block polymers 7750
EDANA Nordic Nonwovens Symposium [1988]. technology, fibers, markets. superabsorbent polymers 6821
electrostatic problems with hospital bedding. shock and fabric flammability 2669
Ethicon patents electrostatic spinning apparatus for manufacturing vascular grafts 6243
European meltblown microfiber embossed web, abrasion resistance due to surface veneer 5134
Fehrer Type K21 random card for nonwoven medical textiles and disposables 5733
Fehrer VF/V21R/K21 high capacity nonwovens line. sanitary and medical applications 8336
fiber and polymer relation to biotechnology 82
film reinforced laminated nonwovens. hospital applications 1110
graft. synthetic vascular. for blood vessels smaller than six millimeters in diameter 7744
grafts, vascular. from Toray. made of ultra-fine fibers 7751
heart valves made of pyrolytic carbon reinforced with fibers to deflect fractures 5444
hemodialysis membranes and their problems. Akzo substitution-modified cellulose membrane 7758
hollow cellulose fiber membranes used for kidney dialysis 5658
hollow fiber plasmapheresis module. Du Pont 8133
hospital garments from Chalmers University 7536
hospital linen waterproofed with vinyl coating. gradual delamination through wear and cleaning 2065
hydrophilic vinyl compound to replace Plaster of Paris bandages 3302
implant. surgical. reinforced. Medicarb carbon fiber. implant from Dunlop Medical Products 7746
implants. hydroxyapatite, synthetic fibrous form from Toa Menryo Kyogo. potential for use 7322
incontinence pad coverstocks and effects on patients' skin. softness and hand of different coverstock materials 7745
incontinence products, marketing for textile rental industry 5443
incontinence products. standards. correlating technical tests with user trial data 6765
incontinence. problems and products, research, patient support, reimbursement programs 2961
incontinence. psychological aspects. medical treatment of patients 793
INDEX [1987]. summaries of papers read. agriculture, hygiene, medical 3544
ITMA [1987]. medical textiles sector. highlights 2549
Japanese technology and competitive strategy in world market 7104
Johnson and Johnson develops laminate wound dressing. high absorbency and low adherence 5993
K-21 Random Carding Machine from Fehrer 1807
knee orthosis. stocking-like stretchable knitted fabric 7743
laundry. cost effective laundering, collection, storage and transport for hospitals 4578
light ray radiation fabric, optical fibers arranged in one side. fabric design and application 5135
liquid distribution mechanisms of hygienic products 296
medical and healthcare applications. major markets, growth areas, composite technology 3548
medical application suitability of wool and polyester knit fabrics 3537
medical tape properties, requirements 8360
medical, geotextile, agricultural uses of manmade textiles 7532
microporous membrane, meter-wide. Gelman Sciences 8395
nonwoven fabrics. growth opportunities 6018
nonwoven for wound dressings 4273
nonwoven spunlace fabrics. medical applications 1113
nonwoven spunlaced items for patient care, compresses, burn dressings, and other hospital products 1111
nonwoven surgical gowns. requirements, advantages over wovens 1112
nonwovens in French hospitals. cost comparisons, advantages 1114
nonwovens in wound management and other patient care applications. supporting devices, masks, dressings, gowns, drapes 1115
nonwovens. acrylic resin binders 5963
nonwovens. important factors for those considering entry into United States markets 5147
nonwovens 2388
Norafin process for nonwovens from VEB Technotex 5973
orthopedic casting tape, knitted structure. combination of glass and elastic fibers 7468
overview of textiles used in surgical dressings, sutures, prostheses 6254
Polish developments for applications of knit fabrics 8670
poly(L-glutamic acid) fibers. biodegradation behaviors 69
polyester knit net fabrics, uses, heat stabilization 5330
polyethylene succinate block copolymers and biodegradation properties 3304
polyurethanes used in biomedicine. measuring degree of microphase separation 5716
polyurethanes used in medical textiles. structure studied with fuzzy mathematics 7849
prosthetic device made of polyester fabric, which integrates into surrounding tissue 5136
prosthetic ligament woven without selvages to eliminate irritation 1855
PVDF-coated fabric by coagulation. Microspore membrane product 8361
requirements of textiles for human implantation (Abstracts) 8396
shock-absorbing pad for shod animals 8379
spunlace, hydroentangled nonwovens. market study by John R. Starr 7944
spunlaced and melt blown nonwovens processes. medical applications 1155
spunlaced nonwovens technology, applications 2618
Stasis, nonwoven fabrics from C. H. Dexter, fluid repellent protection for hospital and emergency fabrics 1853
sterilization, hydrogen peroxide vapor 5819
stronger chitin nonwoven for wound dressings, resin bonding with polymers. wet-lay production process, fabric properties 5137
surgical drapes and gowns using nonwovens. advantages. assessing bacterial barrier properties 1116
surgical dressing from Kendall. improved sorption and liquid transfer 8419

surgical fabrics. Chicopee coated nonwoven polyester fabric with crinkled, nonplanar surface 7467
surgical facemasks manufactured by electrostatic melt spinning process 946
Surgikos patents new surgical fabric 6244
Techtextil Trade Fair, Frankfurt, technical fabrics, fibers 6421
textiles implanted for surgical repair 4642
transdermal drug delivery system 3011
tubular support bandage developed by Seton products 1856
vascular graft developed by Meadox Medicals 1857
warp-knitted applications, overview 8397
wound dressings and plasters made from Sontara 1858
woven and nonwoven materials used as effective barriers to bacteria 1117

HEAT PHENOMENA (SEE ALSO OTHER HEADINGS, SUCH AS COMFORT, DETERIORATION OF MATERIALS, DRYING, INORGANIC FIBERS, INSULATION, SETTING, TEMPERATURE)
advantages and disadvantages of two types of heat sealers for watertight seams. radio waves, high temperatures 6190
APC-2 cross-ply laminates. residual stresses 6044
AS/3501-6 graphite/epoxy composite. degradation caused by overheating 6001
azo disperse dyes. acetylation studies. thermal stability 8517
Bonar Carelle applies Ultraloft system to produce three-dimensional fabrics 7514
carbon fiber. plasma treatment for surface energetic analysis 8026
composites. damage detected by thermo-acoustic measurement 6005
convective heat transfer from human body, effect of fabric 7077
convective heat transfer from human body. effect of fabric 1859
creep behavior of SiC whisker reinforced aluminum composites 6004
dyeing and printing mill in Shanghai. energy consumption analyzed based on energy transfer-conversion 7182
epsilon-caprolactam. thermodynamic characteristics 8095
fabrics to resist extreme temperatures used for sports and everyday apparel 4381
filament wound composite cylinders. electrothermal curing 5958
finishing, flame retardant. various agents. textile burning behavior. ignition mechanisms 7648
firefighters' protective clothing fabrics. durability to heat and light 2658
formaldehyde release markers in durable press reagents determined by thermoanalysis 690
graphite fiber reinforced, metal-matrix composite. residual thermal stress 3515
graphite/epoxy composite. thermal damage effects on delamination toughness 7497
graphite/glass composites. thermal expansion hysteresis 4323
hard twist yarns. forces in heat setting and winding 7381
heat resistance, Granitol for footwear, tests described 664
heat setting. alternatives to tenter heat setting 6160
heat setting. influence of temperature and length of treatment on acrylic/polypropylene yarn characteristics 7385
heat. enhanced cotton cleaning and seed separation. effects of heat on cotton fibers 6446
heat. influence on chemical and physical properties and processing quality 4811
insulations, multilayered, for aerospace vehicles, ceramic fabrics, insulations, and metal foils quilted with ceramic thread 5138
knit fabrics of cotton and polyester compared (Conf. Paper) 8707
linen. effects of heat-induced aging on color, tensile, abrasion, dyeability 7476
liquid crystalline polyethylene terephthalate. effect of extrusion temperature on structure 5696
nonwovens. heat transfer characteristics 665
nylon 66. thermal decomposition investigated by direct pyrolysis 906
perception of temperature relative to textiles. maximum heat flux 1458
phenolic fiber reinforced thermoplastics. temperature dependence of dynamic properties 8424
polyamide yarn-air composite systems, heat transfer process 4864
polyethylene glycol bonds with fabrics. capable storing and releasing thermal energy 1255
polyethylene terephthalate fibers. heat setting 5703
polymers. early stages of crystallization 4876
polypropylene. molecular damage and stabilizing agents 5700
pressing machinery rollers, heat distribution, formulas 551
reactive dye fixation on cotton using microwave heating allows fixation temperature to be reached in five to ten seconds 4437
setting textured polyester. dye uptake in carrier dyeing 6865
sewing machine needles and heat build-up. relation to speed, material thickness and surface density 8645
shrinking and shrinkage force in fabrics during cooling stage 1843
silk coated with Parylene-C polymer evaluated 7281
silk stabilizers tested for effectiveness 7282
steaming cocoons to improve appearance of raw silk after processing 6476
Superba heat setting developed for dye rate continuous dyeing systems 6159
textile drying mechanisms. cylinder drying machines. construction, design, capabilities, accessories 7657
TFE CP. crosslinking effects on thermo-mechanical properties 8041
thermal behavior of Japanese kimonos 6226
thermal behavior of men's and women's clothing 6225
thermal characteristics of asbestos-nylon-epoxy composites. effect of fiber pretreatment 5722
thermal expansion coefficients of cross-ply laminates containing many cracks 6322
Thermo-Flush from Bayer. removal of hydrolyzate from fibers dyed with reactive dyes 6120
thermoanalysis of geosynthetics 7535
thermobonding thermoplastic fiber to superabsorbent polymer cores for use in disposable market 1364
thermograms of polyesters. effect of oligomers 6537
thermoplastic filament winding. heat transfer, heat flow phenomena 5111
three dimensional thermal stresses in angle-ply composite laminates 6015
transfer, determination of apparel's resistance. TGP model 4685
wool. effect of heat studied with nuclear magnetic resonance 7062
yarn and heat treatment surfaces. heat exchange 4959
yellow zircon dye. synthesis from oxides of silicon and zircon using thermal process 6919

HEAT TREATMENT, SEE DRYING, FINISHING, SETTING, YARN PROCESSING.

HEATING AND AIR CONDITIONING
air distribution and constant cross section ducts. design using Apple II microcomputer 746
air washer. heat and mass transfer 735
Behr exhaust air cleaning and heat recovery system 7893
combustion, spontaneous, of fiber in ventilation, filtration systems, formulas 736
compact air conditioning equipment for yarn humidification areas 8831
exhaust treatment system for dryers from Sueddeutscher Kuehlerfabrik Julius Behr 3934
filter panel, APF automatic. from Luwa 4737
filter, APF automatic panel from Luwa 6370
filtration systems. Luwa's automatic panel filter type APF 4738
humidification and heat loads 7190
ITMA [1987]. air engineering trends 1526
laminar air distribution equipment, improved filtration, circulation, energy conservation 4739
Luwa automatic panel filter (APF) air filtration system 3140
Luwa automatic panel filter (APF) for cleaning air in spinning and weaving mills 3139
pneumatic systems, air cleaning and conditioning. ITMA [1987]

highlights 8832
recovery of heat at Timmele Dye House in Sweden 5277
Soviet cotton spinning mill, reduced yarn breakage, humidity, temperature control 5531
spinning, rotor. climatic influences 8181
Switzerland and its successful textile industry and textile machinery industry 4747
ventilation, cooling in a drycleaning plant, health and productivity of employees 6380
ventilation. emission and waste heat removal for drycleaning operations 3952
washer, air. cell type 7184
window treatments, ability to reduce heat loss. study 5448

HEATSETTING, SEE SETTING.

HEDDLES, SEE HARNESSES.

HELANCA IS A TEXTURED YARN.

HEMMING, SEE FUSING, SEAMING, SEWING.

HEMP
new fibers, mathematical model, method for processing 4820
scutching hemp fibers into tows on flax industry machinery for spinning blends with polyester or jute 4913
waste removal with air jet during sorting and pressing 4914

HERCULON IS AN OLEFIN FIBER.

HIGH MODULUS FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS ARAMID FIBERS, OLEFIN FIBERS--POLYETHYLENE, VISCOSE FIBERS)
aluminum sulfate content of precipitation bath at high modulus viscose. effect on fiber properties 3264
aramid copolymers. structure and thermomechanical properties 1650
aromatic polyamide-imide. high modulus fibers and films 5711
ceramic 7332
composites. surface reactions on high performance fibers studied with Fourier transform infrared spectroscopy 7338
determination of sulfuric acid in precipitation bath for viscose 3810
exotic fibers in the industrial fabrics industry, aramids, ceramics, modacrylic, and others. applications 5664
gaseous discharges from manufacture of polyacrylonitrile fibers, cleaning up waste gases 4840
gel spinning fibers from ultra-high molecular weight polymers 5665
Lenzing Modal. cellulosic fiber properties and market appeal 2462
Lenzing's specialty high performance fiber range. P84 polyimide fiber and filament 885
Mitsubishi Rayon acrylic fiber with very high strength for use as asbestos substitute 6490
PBZT and PBO high modulus polymeric fibers in reinforced composites (Conf. Paper) 8039
poly(2,2'-dichloro-4,4'-biphenylene pyromellitimide). high tenacity high modulus film 884
PRD-149 Kevlar aramid fiber from Du Pont 3252
production techniques. structure. applications 1662
Sibion. water vapor sorption 4839
Spectra high performance fibers. Allied. ballistic protection 8099
spectroscopy, Raman. applications 6064
Teijin's coal pitch-source carbon fiber 7302
ultra high modulus. production problems. two processes reach pilot scale 4885
ultrahigh modulus filaments. aromatic copolyesters and polyethylene terephthalate co-p-oxybenzoate 7323
viscose and modal regenerated cellulosic fibers. production and properties 877

HIGH TEMPERATURE FIBERS, SEE INORGANIC FIBERS, MANMADE HIGH TEMPERATURE FIBERS, AND UNDER SUBJECT HEADINGS OF SPECIFIC GENERIC CLASSES OF FIBERS, SUCH AS ARAMID FIBERS, NYLON FIBERS.

HISTORY (SEE ALSO UNDER HEADINGS OF SPECIFIC SUBJECTS)
alkaline deacidifying agents. effects on historic and naturally aged cellulosic textiles 7932
archaeological tools and analysis of ancient textiles 3807
Australian labor banners commemorating Eight-Hours Day 3012
Austrian laundering, drycleaning trades. history 3734
Austrian laundry, drycleaning industries. history and development 5592
Berlin wool work of the nineteenth century, technique described 2021
bleaching, chlorite. process. economical, environmentally safe 6823
drycleaning and laundering industry [after 1945] in Austria 4783
Du Pont's impact on hosiery industry from development of nylon in 1930's to present with Lycra 2670
Du Pont's impact on hosiery industry from nylon to Lycra, history 2670
dyestuffs industry, international 7584
E. Stucchi. history [1860-1987] 5562
embroidery from Germany in late Middle Ages. priests' vestments in wool and linen 4610
Faeroe Islands. traditional knitting techniques 2600
flocking. electrostatic. methods and materials 3675
historic and prehistoric textiles studied with vibrational microspectroscopy 7795
Hmong textile art called pa ndhav, which translates as flower cloth 4532
Hubbell Trading Post. miniature paintings of Navajo rug designs 2996
India. history and current state of mill, power loom, and hand loom sectors 6405
Indian chintz and velvet textiles from seventeenth and eighteenth centuries 1394
J.P. Stevens and Company, history [1813 to present]. [1986-1987] company position, divisions, facilities, sales figures 3074
Jewish prayer shawls woven by women at synagogue in Pennsylvania 8649
jute industry. Pakistan, situation following [1971] secession of East Pakistan 827
lace. pieces from Hertha Koenig collection. review 4646
lacis embroidery, techniques 1286
Lesage. leading embroidery firm in world 2841
looms, shuttleless loom design and introduction 4194
macromolecular chemistry, affect on textile industry, development of polymers 4065
mauve from coal tar benzene discovery. William Henry Perkin 7617
medieval England, foreign textiles 1580
Mercer and Lowe, mercerizing cotton fabrics 1191
mercerization. John Mercer's original work to modern experimentation 1910
mill [1837] cotton spinning mill transformed to Rheinish Industrial Museum. lifestyle of workers 4779
Museum of Vintage Fashion in San Francisco 2965
Nasca sprang tassels, principles involved in manufacture 1399
Navajo rugs. material sources 1400
Navajo rugs 1011
necktie, history, origins, types 5411
nylon 6. Paul Schlack and I. G. Farbenindustrie 8096
nylon development fifty years ago. history. impact on world's hosiery markets 7976
nylon, development, inventor, impact on hosiery industry 3283
nylon. Du Pont. formation of manmade fibers industry 2475
nylon 3243
People's Republic of China, textile history and current goals 6424
petrochemical industry history 3276
polyamides, discovery and development of history 5681
polyamides. worldwide production, applications, and history 5680
prehistoric and historic textiles. integration of results of a number of analyses. Etowah example 7955
Quaker Tapestry celebrates history of Quakers. a group effort of

Quakers around the world 4541
Quarry Bank Mill. working museum of cotton industry 8753
quilted bedcovers exhibition at the Wadsworth Atheneum in Hartford. [1700–1987] represented 2999
quilts, African-American. strip or improvisational, traditional and contemporary 4549
religious rituals and the symbolic significance of textiles 1407
samplers in cross stitch. model or pattern cloths, history traced 2027
sarees of Kancheepuram, India. history, tradition. silk types 8622
Schiaparelli. women's fashion designer. history and designs 2968
shawls brought from Kashmir to Europe [1700–1870] displayed at de Young museum in San Francisco 2944
shawls. Russian. origins, technique, history 6962
silk flags carried into Civil War battles by Pennsylvania soldiers. history and preservation of collection 3013
silk weaving, fourteenth and fifteenth centuries. London 1009
sixth century Coptic tapestry representing scenes from Nile River and allegorical figure 1408
skin, hair, silk discoveries lead to data on animal breed types used for manufacture of parchment and textiles 7956
Soshun Biko. early nineteenth century treatise documenting hand held loop manipulation braiding techniques 1403
southern United States textile industry, historical perspective 7969
Swiss Society of Chemists and Colorists 4784
tapa. production and significance in Tongan society 1409
textile industry in Surat India. sales revenue, investments, profitability, economics 7857
textile painting, history. fabric deterioration, protection of pictorial layers 5188
textile production in 20th century (Conf. Paper) 8963
Textile Society of Canada. fifty years of Canadian textile industry changes 8928
textured nylon yarn production in United Kingdom by Viscosuisse 7388
tunics or galabiyehs excavated from Egyptian sites dating from medieval Islamic period 1380
USA, economic analysis, history 4006
weaving. Bolivian folk. Aymara and Quechua motifs on wool. patterning in warp rather than weft 4638
Western Anatolia [1750–1914]. overview of carpet makers 1414
wool marketing in Australia 7290
wool morphology evolution in Merino sheep 834

HOME FURNISHINGS (SEE ALSO OTHER HEADINGS, SUCH AS BAGS, BLANKETS, CARPETS, DISPOSABLES, LEATHER SUBSTITUTES, NONWOVEN FABRICS, FASHION)

adhesive laminate for nursery decoration from Springs 8662
African-American quilts 7691
alternative window covering market [1988]. highlights, market offerings 2184
Andre Richard, transformation into leading supplier for coordinated bathroom ensembles, acquisition by Springs Industries 3800
area rugs, Atlanta [January 1988] floor coverings market 2185
area rugs, [1988] market. trends toward green 2186
area rugs. mass merchants, new fashion awareness 2168
Atmosphere home fabrics display at [1987] Heimtextil in Frankfurt 3801
automatic blanket sales down, supplier innovations 2998
Avante Bedspreads. accessories for bedroom styles 2178
Beacon Manufacturing, blanket manufacturer profile 2201
bed and bath. Fieldcrest Cannon's two upscale collections 6256
bedding products, pillows, mattress pads, health-oriented bedding. types, contribution to sleeping comfort 2187
bedding, linens. wool crimping processes developed for bedding applications 8004
bedding. duvets, great increase in consumer demand 3019
British sector. present and future growth of fashion segment 8943
British Silver Studio Collection designs for United States home textiles manufacturers through Nigel French Enterprises 5445
broderie perse used in quilts based on Oriental rugs 4550
Burlington House Draperies' curtain collections at mini market, lace, jacquard, textured. future plans 2179
buyer's guide [1988], for home fashions suppliers and products 2188
Cannon and its Monticello discount label. changes in distribution in retailing home textiles 3088
carpet sales and direct mill sales to retailers. market changes affecting floor covering industry 3020
carpets. Newhey. new designs 5440
carpets. radiant panel smoke emission tests 8705
chair covers, needlepoint 7684
chairs upholstered with needlepoint 7683
chatelaine pincushion. binding stitch and counted thread work 4542
Color Marketing Group, future popular colors in home furnishings predicted 6098
color predictions [1989] and beyond from Color Marketing Group 3021
colors and designs [spring, summer 1989] in home textiles. J. P. Stevens' predictions 3010
combustibility testing and smoke production dynamics 693
combustible construction materials in buildings. Switzerland 763
combustion standards. test methods. legal regulations 691
comfort. beds 1429
computer aided design and manufacture of net curtains 8604
cotton fabrics. growing market share, performance characteristics, processing 3224
cotton's market share, sales at retail 818
CSIRO develops nonwoven made of blended wool and manmade fibers for use in quilts. thermal bonding 1805
curtain fabrics. thermal insulative performance 2680
curtains and draperies in new soft alternative window treatments 2176
curtains, raschel knit. techniques, finer synthetic yarns allow more designs 4259
cushioning products from fiberfill and fiber/down combination producers 3802
Cutron Curtain's fan top treatment for Swagger ruffled line 646
Dakotah's new Victorian and country designs. shift in merchandising, line products, price points 2180
decorative fabrics, documentary prints for popularity due to historical restoration, antique and reproduction furniture 3022
decorative pillow market [February 1988], preview [Christmas 1988] styles for pillows, chair pads, various products 2189
decorative pillow market, sourcing domestically or abroad. various company representatives describe their collections 1430
designer licensing. Dan River's niche marketing strategy, upscale collections 6255
Dicey Mills manufactures residential upholstery fabric 6734
directory for interior textiles industry [1988] 8650
Directory of Reupholstery Resources [1988], alphabetical and regional listing 6253
Doblin Fabrics' Portfolio collection, coordinated prints and wovens for furniture manufacturers. price points, delivery time 1860
draperies. Burlington's Quick-Turn plan 8672
drapes. sunlight degradation often appears only after cleaning. hazard of use 4643
Du Pont's producer-dyed acrylic program for home furnishings fabric mills 1639
dyeing, home. Remazol dyes. applications 4426
fabricating a drum table, steps 6258
fabrics, Knoll Textiles installs computerized storage tube, rack, and bin system 3909
fabrics, machine for manufacturing. warp and raschel from Karl Mayer 8648
Fairchild Fact File. home textiles and related products 8929
Faribo's new napped cotton jacquard throws. fabric handle, patterns, price 647
Feels. woven fabric developed by Joseph Newsome for durability 7521
flame retardant home textiles. testing at EMPA St. Gallen 692
flame retardant Viscose FR fiber from Lenzing 98
flammability regulations. impact on upholstered furniture 1427

flannel sheet market profiled 1431
flannel sheets, leveling off of market 2190
furniture fabrics coated with latex on reverse side. coating dissolved by some solvents 7702
futons. Fijitsu General drying unit 8833
growth in European industry due to chemical fibers 6259
growth predictions for sheets, pillowcases, towels, blankets, bedding, daybed seats 2191
Heimtextil show emphasizes quality and design 2181
Heimtextil [1988] exhibition. rich, opulent colors. decorative bedding and towel designs from various overseas manufacturers 2994
Heimtextil [1988]. fabric trends and exhibitors 1861
high performance polymer fibers, films, plastics in the home 6507
holiday table linen market [1988]. manufacturers' expectations and products 2192
home fabrics. changing trends. new forms, structures, materials, knits- woven competition 3806
Home Fashions Marketing to offer window coverings and other home furnishing products from Far East 3083
horizontal fabric mini-blind introduced by Hunter Douglas N.A. price, selection, industry reaction 3803
independent table linen manufacturers exhibit at New York Gourmet Show. products and price points 2193
industry product diversification's effect. company representatives surveyed 4706
industry. changes in home fashions. retailing 7039
industry. production of rayon and acetate threatened. polyester as possible alternative 4051
Interior Fabrics Technologies (INTEK), manufacturer of specialty fabrics for systems manufacturers, products 3903
J. P. Stevens. leveraged buyout by company to avoid outside raiders 2243
jacquard towel market. products, price points 2194
K-Mart. merchandise manager Marylin Gill interviewed 648
Kieber Model 2000 and 64 pleating machines and DS Model Bello steam chamber (Trade Lit.) 8576
Limelight collection from International Wool Secretariat 3014
Linen and Domestics' Market, merchandise and buyer's purchases. consumer demand for natural fibers 649
Linens Limited hand washes and repairs fine linens 3032
linens. Mervyn's department stores. developed private labels. increased emphasis on quality control 4708
luxurious natural fiber products in demand 6260
Lynn Johnson. textile designer 3015
market review [1987]. towel trade. cotton use. business by mill-merged companies 1175
mats entrance. processing by textile rental operators 3745
modified waterfall pillow. construction and application 3023
net curtains. raschel technology 5447
New Zealand wool. applications in bedding products 2433
novelty yarns in woven fabrics. market trends 977
Paris Tex'Styles, home fashions. sheers, stains, textured towels and tribute to designer Bordier 3016
pinch pleat drapes. manufacture 3024
polyester, producer colored. Eastman and Kanebo joint marketing 4860
polypropylene useful for upholstery and other accessories. resistance to stains, abrasion, light 3549
polytetrafluoroethylene. properties and applications in marine and awnings industries 1674
polyurethane foam use in furniture industry, debate over use because of fire hazards 3804
prices rise for manmade fibers in home furnishings industry 2468
Quaker Fabrics concentrates on textured jacquard and dobby upholstery fabrics 2650
quilts based on Oriental rug format and structure 4551
raschel knit. computerization of card puncher for production 8300
rayon fibers from Avtex 1649
Regal Rugs expands its production and marketing 3008
retail performance [1987] statistical analysis 2195
Rose York's Quallotwin pillow, two Du Pont fills in one product 650
Salone del Mobile furniture exhibit. ratchet applications, multifunctional seating, slip covers 2182
serviceability. furniture and coating materials 6284
Shaker rag rugs 5024
sheets, Albert Sardelli of Wamsutta Pacific, director of creative services. interview 3025
sheets, top selling [1987] from major manufacturers. floral patterns popular 2196
sheets. retailing strategies 3026
Spunlace fabrics. production process and applications 6075
spunlaced polyester fabrics for sheets and pillow cases, abrasion resistance 1071
synthetics market expanding in home fashions 7040
table linens at retail, item-oriented displays 3027
table linens. market trends, sizing, fabrics, category market share, assortment composition 2197
technical advances in making-up 8605
Tennessee Woolen Mills. blanket collections compete with European designs 3017
Thomaston Mills, small, private, United States mills. bedding products 7126
towel market. [1987] best sellers from major manufacturers 1432
towels, printing 5292
Twin Panda introduces line machine embroidered bed linens and accessories 3018
Unika Vaev profiled. fabrics for office furnishings 1428
United States sheet, towel, pillowcase manufacturers. [1987] production 5446
United States shipments of sheets, towels, and pillowcases 3171
upholstery and end use requirements. British Standard 2543, solvent and wet cleaning, flammability 6261
upholstery fabric predictions [1988] from United States mills 1426
upholstery fabric, standards. flaws and defects, roll fabric condition, pattern repeat, pick count 1844
upholstery fabrics, precautions for drycleaner 7709
upholstery, knit fabrics. standards and guidelines 3539
virgin wool mattress pads from Slumberwool U.S.A. company profile 839
wall coverings, West German market. survey of marketing and sales representatives 4644
waterbed sheet market, products. flat sales, targeting the mainstream consumer 2198
WestPoint Pepperell bids for J.P. Stevens 3095
WestPoint Pepperell's entry into upholstery market. personnel, products, delivery time 2183
WestPoint Pepperell's Masterwear carpet cushion. composition, properties, promotional campaign 6247
window coverings, delicate. consumer demand drives up sales 6257
window treatments, ability to reduce heat loss. study 5448
wool bedding. Ultrafresh antimicrobial treatment 5187
Worth Street Textile Market Rules, guidelines for testing at upholstery mills 6024
woven fabrics for curtains 8663

HOOKED FIBERS

HOSIERY (SEE ALSO OTHER HEADINGS, SUCH AS HEALTHCARE AND MEDICAL TEXTILES, KNIT FABRICS, KNITTING AND HOSIERY MILLS)
abrasion resistance of men's socks tested 2145
acrylic fibers. Supacryl 8013
computers and software. electronic data information systems, maintenance, dyeing 4515
Cotton Tops from Round The Clock. all-in-one garment 8637
Courtaulds Hosiery changes name to Aristoc. introduces new brands 4615
designing jacquard patterns for multi-color sinker hosiery knitting 4238
dimensional control by image analysis 3134
Du Pont workshop, Intrigue, [fall 1988]. leg looks for four different categories forecast 1118

Du Pont's expansion plans for hosiery business 3873
Du Pont's Supertec Nylon 90 and Sheerspeed Nylon 289, new hosiery yarns 6530
Du Pont's Supertec Nylon 90, texturing at high speeds. industry reaction 6613
Du Pont's Ultratech Orlon socks for athletes, acrylic fiber, properties, composition 6241
fashion trends [fall 1988]. highlights 6237
fit properties, resistance to stretch evaluated 6766
formula for jacquard hosiery generates data for elasticity and yarn consumption 5054
guide to hosiery yarn and fibers. companies, products, end uses 2534
Holeproof's Computer Socks project. product development, media campaign 1119
hosiery machinery displayed at ITMA [1987] Exhibition 5045
International Hosiery Exposition 6683
IRO's Iro-Sox stitch length control system for sock knitting 4232
Jockey International's Jockey For Her hosiery line introduced 1862
knitted method. four wale plain jersey construction limits laddering 240
legwear and bodywear manufacturers' expectations [1988]. industry outlook, concerns, trends 2121
legwear, men's underwear. [1988] buyer's resource guide to designer names, licensees 2970
London. [spring 1988] trends 1370
Lycra and cotton dominate hosiery market, reasons why 1381
machinery manufacturers, men's and children's 8291
market outlook. women's [fall 1988] retail hosiery and bodywear sales. products 5430
Mec-Mor's Variatex machines for stockings and socks. descriptions 7427
men's hosiery and underwear fibers and yarns from various manufacturers 2535
men's hosiery market, dress socks explosion. patterns, price points, retail sales 1864
men's market [1988]. trends and sampling of manufacturers' products 1120
men's, importance of color and pattern in generating traffic and sales in cautious retail climate 2871
men's. trends [fall 1988] 2903
model EFS yarn feeder from Memminger. resolves production problems in sock manufacture 6688
needles. Groz-Beckert. innovations 5923
outsize. [1988] buyers guide, resource listing 5114
packaging. use of photography and retro look 1865
pantyhose. dimensional instability. calculating yarn lengths knitted into hose 5057
Ruco-Blanc OAO. fluorescent whitening agent for acrylic and polyamide blends used in hosiery from Rudolf 5194
silken sheer manufacturers resource guide. company name, address, and products description 1122
silken sheers, manufacturers and retailers discuss keys to continuing expansion in the lucrative category 1121
sock boarding machine, TF-96 from Firsan 3722
sock market, casual [1988]. trends and manufacturers' products 1123
Sox Appeal, hosiery specialty chain. company franchises, retail philosophy, merchandising strategy, product mix 1863
static dyeing machinery by Cubotex and Gaston County for hosiery 2761
styles [fall 1988]. florals, textures, plain colors 2116
super-support. surge in otherwise saturated Japanese market 8638
Supertec 90, Du Pont's nylon hosiery fiber. innovative features 4865
support and control styles growing. market growth, expectations 8639
technological advances lead to improved sheer in nylon yarns 3285
tights and stockings at Pitti Lingerie show 627
trend [spring 1988] toward lighter weight sheers in skin tones 2971
trends [1988]. influence of short skirts 1373
trends [fall 1988] hosiery looks described by major retail buyers 7718
Ultratech Orlon, Du Pont's high performance acrylic fiber for athletic sock market 2447
women's athletic sock mixing fashion and function 3778
women's [fall 1988]. styles, colors for socks, thigh highs, and pantyhose 2872
women's. market [1988]. prominent trends, products 1124

HOSIERY INDUSTRY (SEE ALSO OTHER HEADINGS, SUCH AS KNITTING AND HOSIERY MILLS, KNITTING INDUSTRY, TEXTILE TRADE)
Adams-Millis acquired by Millis family 6338
Bear Brand and their image restyling 7022
Budapest mill in Hungary. investments in new technology 8751
Cirnedol 9615 and 9616 from Vickers. new grade lubricating oil minimizes atmospheric pollution 3457 3953
consumer interest growing in cotton and spandex hose. how mills are coping 6403
Davies Eurotech's Qualitex yarn tension device using balls 4157
Du Pont's impact on hosiery industry from development of nylon in 1930's to present with Lycra 2670
Du Pont's Lycra spandex, impact on hosiery and apparel industry 3260
economic and fashion trends affecting hosiery manufacturing [1988] 1125
fashions [fall 1988] influenced by ready-to-wear 4616
Hanes' Quick Response program. success and expansion after eighteen months 8777
history of nylon, development, inventor, impact on hosiery industry 3283
Hungarian. nylon 6 and 66 textured yarns compared for substitution 8210
innerwear. Jockey International, profile of successful corporate expansion, markets, and products 7665
International Hosiery Exposition 6683
Italian [1987] budget. investment trend to counteract drop in exports 7940
Lineberger elected president of NAHM, other new board members and NAHM's purpose 5139
manufacturers and retailers report [fall 1988] trends influenced by ready-to-wear. effect on casual and sheer hosiery 4617
market trends [1987, 1988]. statistics on hosiery/legwear industry at manufacturer and retailer levels 6035
men's trends, styles, and fabrics [fall 1988] 4618
nylon development fifty years ago. history. impact on world's hosiery markets 7976
packaging and equipment for hosiery and men's underwear 1866
pantyhose resources, styles, retail prices. Buyer's Guide 8640
Poland. knitting, hosiery industries [since 1980]. achievements, production 244
product guide for hosiery manufacturing. alphabetical by products and manufacturers 7489
profile of hosiery mill of future 3458
Sara Lee merger agreement with Adams-Millis and Stedman for hosiery and underwear production 3112
Sara Lee to merge with Adams-Millis 7224
Sara Lee, owner of Hanes brand name, agreement to buy Adams-Millis maker of Hanes casual hosiery. agreement details 2258
socks. reduction of manual operations for gain in productivity 6684
technology. increase in demand. problems with yarn quality 3390
United States hosiery industry [1987] status. rise in production and exports, other general facts 3531
universal product codes used in hosiery industry. advantages, packaging placement, department store use 1867

HOSIERY MACHINERY
accessories and sock knitting machines featured at [1987] ITMA 3469
automation of hosiery equipment and manufacturing procedures at

International Hosiery Exhibition 8589
Brematex Zero line 5925
Budapest mill in Hungary. investments in new technology 8751
circular pantyhose knitter, Savio-Matec's Ultra Assembler 236
Conti hosiery knitting machines. plush fabric and false rib hosiery 3460
Czech. manufacturers exhibiting at [1987] ITMA 7442
DBM Mario Della Bella manufactures boarding and packing machines for hosiery 4225
Detexomat machines for women's hosiery. modular system units 5903
double cylinder. Savio Matec 2002 model 5065
dyeing. Radial Flow Static Dyeing System from Gaston County. ultra-sheer pantyhose 3614
dyeing/extracting machines for hosiery, features of various systems 5241
electronic applications in hosiery machinery seen at ITMA Paris reviewed 1024
electronic patterning and guidance controls. automatic sock knitting at [1987] ITMA 2606
hosiery knitting machinery exhibited at [1987] ITMA 7428
International Hosiery Exhibition [1988], machinery and market outlook for next year 4223
International Hosiery Exhibition, hosiery equipment 6371
International Hosiery Exposition [1988]. higher speeds, computerization, electronics. advances for men's socks 4224
International Hosiery Show, products and machine trends 6767
IRO's Iro-Sox stitch length control system for sock knitting 4232
ITMA [1987] exhibition 5045
ITMA [1987]. first part of an overview of machines presented by Italian firms 8290
ITMA [1987]. hosiery and sock knitting machinery. small diameter machines 3464
ITMA [1987]. innovations in stocking machinery exhibited by Italian firms 8286
ITMA [1987]. new machines and improvements 1015
ITMA [1987]. processing versatility 3459
ITMA [1987]. technological development and quality in machines for hosiery 6707
knitting machines for legwear seen at ITMA [1987] 3466
knitting, circular. ELHA from Lucas. electronic controls 3474
machinery by Savio Matec for women's stockings and socks 8284
machinery, techniques and developments shown at ITMA [1987] exhibition 7425
Magica half hose machine. elaborate new machinery for intarsia 5904
manufacturers, survey of electronic equipment, list of suppliers 8291
Mec-Mor's Variatex range for stockings and socks. descriptions 7427
Memminger's EFS electronic, tension controlled feeder 4262
Meridiana machine by Santoni. latest disc-cylinder model. capabilities 6685
model EFS yarn feeder from Memminger. resolves production problems in sock manufacture 6688
needle load determined for single cylinder hosiery knitters 237
North Carolina men's hosiery manufacturers upgrade mills with electronic knitting machinery, plant equipment 6686
Nova D double cylinder, double system kinks/links circular knitting machine from Strojimport 6687
Proll Loman Colormat-800 versus Tis TFK-100 dyeing machines with pressure rollers for dyeing hosiery 5238
recent developments for socks, stockings and pantyhose. tables 7429
Rosso manufactures Rototurn. automatic sock turning device 4226
Rumi Filli knitting machinery, hosiery machinery. ITMA [1987] preview 249
Solis manufactures automated machines to manufacture and handle pantyhose 4227
Trip-Lite's Sock-Feed System with ITF Yarn Feeder and Thetis programmable transmission system 4246
Ultra-Assembler machine for one piece pantyhose. innovations 5905
Uniplet small diameter knitting machines from Elitex 5064

HOSTALEN IS AN OLEFIN FIBER.

HUMIDITY (SEE ALSO OTHER HEADINGS, SUCH AS AIR CONDITIONING, ENVIRONMENT, MOISTURE PHENOMENA)
air velocity levels in textile mills. humidification survey by SITRA 3936
automotive fabrics. blue wool sample for testing of polymeric materials 7095
compact air conditioning equipment for yarn humidification areas 8831
control of temperature, humidity, air motion in a drycleaning plant. health and productivity of employees 6380
Fregon filters control temperature and humidity in refrigerators 6763
metalized Nitron fibers. heat treatment and humidity effects on electrical conductivity 7360
moisture-induced changes in fabric structure 2662
Novatherm Klimageraete humidity control systems to maintain textile quality 3935
pressure roller, improved battings with roller lubrication, humidity 4902
rotor spinning. influence on yarn quality 8181
slashing, weaving cotton yarn, humidity and temperature parameters influenced by the size and drying process 4994
Soviet cotton spinning mill, air conditioning system reduces yarn breakages 5531
sugar on cotton, causes. effect of humidity on processing 7993
textile mill air conditioning and cleaning systems. ITMA [1987] highlights 6832

HYGIENE, SEE INDUSTRIAL HEALTH AND SAFETY, LEGISLATION.

IDENTIFICATION (SEE ALSO OTHER HEADINGS, SUCH AS CHROMATOGRAPHIC ANALYSIS, COLOR MATCHING, ELECTRON MICROSCOPY, FABRIC TESTING, FIBER TESTING, MARKING, RADIATION, RADIOACTIVE TRACERS, SPECTRUM ANALYSIS, TEXTILE NUCLEONICS, TEXTILE TESTING, YARN TESTING, X-RAY, AND UNDER SUBJECT HEADINGS OF SPECIFIC FABRICS, FIBERS, AND YARNS)
angora blended yarn. blend ratio measurement using density gradient tube 663
animal fibers. examined by electrophoresis 659
fiber and fiber blend identification with scanning electron microscopy 1442
triphenylmethane compounds. synthesis and application as reagents for identification of hydrazine 2330
wool and mohair. fiber scale height method 3044
X-ray crystallography to identify fabric's fiber morphology 8710

IMPORTS, SEE TEXTILE INDUSTRY AND UNDER SUBJECT HEADINGS OF SPECIFIC BRANCHES OF INDUSTRY, SUCH AS APPAREL INDUSTRY.

INDOOR/OUTDOOR CARPETS, SEE CARPETS.

INDUSTRIAL ENGINEERING (SEE ALSO OTHER HEADINGS, SUCH AS COMPUTERS AND PROGRAMMING, ENERGY, ENVIRONMENT, FORECASTS, INDUSTRIAL HEALTH AND SAFETY, INVENTORY CONTROL, MANAGEMENT, MILL BUILDINGS, NOISE, PRODUCTION CONTROL, OPERATIONS RESEARCH, SIMULATION, STATISTICAL METHODS, TIME STUDY)
air jet. looms. weft and warp yarn loads 5891
artificial intelligence and the textile industry. expert systems 8811
chain stitch sewing machine, kinematic analysis of take-up spring 7170
computer testing of needle-key zone load in circular knitting 7159
dam rebuilding with geotextiles and polypropylene geomembrane

coating 7788
Dan River's strategy to encourage industrial engineers to create change 3110
data analysis model for computer integrated manufacturing 8812
data processing role in computer integrated manufacturing 7150
design charts for geotextile reinforced roads. determination of aggregate thickness 7157
Directionally Structured Filament (DSF) fabrics. applications as geotextiles 2672
elastic components to equalize inertia in knitting machinery 7158
exchange for Austrian superhighway. manmade fiber fleece as substrate 7759
Flexible Manufacturing System (FMS) from Rieter 7156
flexural vibrations, computer analysis, design of machinery and drive 7171
geogrid reinforcement between granular layer and clay substrate in test model evaluation 7832
geogrid. tensioned membrane function on peat subgrade 7764
geogrids. definition and specifications 3028
geomembranes. promotion and applications 3188
geosynthetics in drainage control at waste impoundment site 3029
geosynthetics used for leachate system at Arizona copper mine. detection and repair of leak 3030
geotextile dam reinforcement. additional steel wire mesh to complete sufficiently rigid structure 7777
geotextile foundation treatments and anti-piping barriers in Tucurui Dam, Brazil 7773
geotextile layer linked to gravel bed in railway subgrades via computer model 7778
geotextile parameters for optimum reinforcement of unpaved roads 7789
geotextile performance in roadbed aggregate design, review 6779
geotextile polypropylene liner in concrete storage tank for contaminated brine from petrochemicals 8664
geotextile polypropylene nonwoven under dike across retaining pond for run-off from coal mine 8665
geotextile reinforcement of Finnish coastal area. design decisions and winter ice utilization 7781
geotextile reinforcement on roadbeds with light aggregate fill on peat soils 6778
geotextile separator fabrics examined for progressive deterioration in road use 7770
geotextile subgrade reinforcement of railway courses 7784
geotextiles and geogrids. role in embankment construction on Delaware River project 7779
geotextiles as drain elements in small earth dams 7042
geotextiles as road reinforcement substitutes in resource poor regions 7772
geotextiles for reduction of railway ballast compression 7783
geotextiles. field tests as railway bed separating elements 7817
geotextiles. history, growth, applications 7790
geotextiles. mathematical model for determining minimum requirements for desired roadbed characteristics 7842
Hungary's TEMASOL and TEMADRAIN geotextile products and applications 7760
India. economics of loom conversion 7415
ISOUPP planning system for textile production, establishing norms 4727
ITMA [1987]. computers and manufacturing logistics 6351
knitting machine needle-key zone, dynamic load, calculation method 7161
looms. modification of take-up mechanisms to prevent weft defects 8259
manmade fiber fleece for substrate in Austrian superhighway exchange 7759
monitoring equipment. Baeckmann CMOS rheostat for textile monitoring technology 4726
needle latch design of circular knitting machines. calculation of latch rigidity 7160
nonwoven polypropylene mats for land protection during heavy construction 7791
polyester, polyethylene and polypropylene geotextiles in reinforcements for bridge embankment project 7766
productivity. production lay-out and materials handling and storage 5520
programming in BASIC, introduction, graphics 8795
railroad sleeper beds. performance of gravel-filled polyester bags 7792
railway reinforced with geotextiles. compared with traditional reconstruction and traditionally-repaired section 7786
reservoir membrane liner in Cincinnati Water Works 8666
rupture properties predicted 6063
single bed, roller fabric transport system. defects and measurement system 7162
Third International Geotextile Congress proceedings 7965
vertical wick drains installed at Puerto Rican construction site to consolidate soils 3031
warehouse, Bebie. five stories tall, handles two to four tons of material 5541
wastewater treatment systems at twelve Japanese industrial facilities 7919
weft insertion mechanisms for faster shuttleless looms 7406

INDUSTRIAL FABRICS (SEE ALSO OTHER HEADINGS, SUCH AS AUTOMOTIVE FABRICS, COATED FABRICS, COMPOSITES, DISPOSABLES, FILTER FABRICS, INSULATION, LAMINATES, NARROW FABRICS, PAPERMAKING FABRICS, RUBBER PRODUCTS, TIRE CORD)
absorbency, liquid. uptake rates. influences 6054
acoustic baffling wall, flexible, made with Trevira polyester from Hoechst 6037
adhesive nonwovens as plaster substrates 3545
adhesive, bonded nonwoven felt. Lantor Aquamat capillary matting for water management 343
aerospace plastics. impregnating system. Caratsch 5968
agricultural and horticultural applications 360
aircraft firewall fabric. lightweight construction 2674
airline cabin furnishings made of new fiberglass-CFRP. advantages. regulations limiting heat release 7756
alkalies and effects on geotextiles 6771
alterations using low temperature plasma. German research 7935
aluminum silicate fibers and substitution for asbestos 5677
Angst & Pfister glass, polyamide, aramid, and ceramic fabric developments 4363
Asahi/Chuo coil spring made of highly stretched polyacetal fiber 1681
asbestos substitutes. product determinations 5964
asbestos-free friction facings. evaporating solvent avoided 8339
asphalt mixes containing reinforcing fibers of linear alternating polyketone polymers to prevent shrinkage 5141
asphalt/geotextile combination in road material for crack retardation 7524
ASTM and industry standards. Minimum Average Roll Value for geotextiles 8398
AT-280-SB shuttle loom for industrial fabric weaving 195
automakers, expectations for fabric suppliers 4300
automotive applications. standards evaluated 7045
automotive fabrics 6246
awnings and canopies. computer aided engineering and testing 8661
Awnlit. illuminated awning developed by Duracote 8667
Bekaert's Geo-Fleximat woven steel geotextile. stress distribution features 7522
bamboo and polymer geogrids. shear behavior testing 6772
barrier films, monolithic breathable 6055
bi-axial and multi-axial fabrics on raschel machines manufactured by Karl Mayer 4233
bitumen and flexible carrier fabrics as roofing materials. properties 291
bituminous roofs. roll roofing materials 361
Burlington leaves field completely, sells industrial fabrics division to Takata 2248
Buy American Act, provisions explained. United States Industrial Fabrics Institute members 794

Buyer's Guide [1988]. products, manufacturers, trade names, consultants 2671
calculation of bearing capacity, failure modes of reinforced soil bearing walls 6773
cement laminates, nonwoven fabric reinforced 6038
ceramic fabrics, insulations, and metal foils quilted using ceramic thread, insulations for aerospace vehicles 5138
ceramic fiber from Shimadzu. applications as cable conductor 1659
ceramic fibers as asbestos substitute. production and applications 5637
civil engineering. nonwovens. applications for Pegaso's PEGEO 4364
classical bearing capacity theory for geotextile reinforced embankment failure refuted 7763
code changes for awnings. process, key design buzzwords 6262
Comporgan Rendszerhaz produces stabilizing geotextiles 6768
composite pressed nonwovens. acoustic insulation from fiber wastes 4374
composites, high temperature. spacecraft applications project at North Carolina State 8372
compression resistance, relation of knitting method to strength 6788
conductive nonwovens. Lantorine fabrics based on aluminum, nickel, copper 8415
conveyor belts, manufacture, classification. growth of industry 7041
conveyor tapes, designs for textile interlayers 1869
corona technology applied to geotextiles. inline system from Matai 3564
cotton fabrics, strength increased with core yarns 7391
creep behavior. ITV pneumatically loaded testing device 8721
cutting machinery for use in industrial fabric shops, product review 537
cutting. Aqua Jet water jet that cuts through Kevlar 6187
design linked by computer to manufacturing 1045
deterioration of nylon 6 fishing net twines after exposure to ultraviolet light 5814
determination of interfacial shear between geotextiles and construction materials 7091
diagonal yarns from warp beams on RS 2 DS multiaxial raschel machine 1027
directionally structured fiber fabrics. third generation geotextiles 3532
Directionally Structured Filament (DSF) fabrics. applications as geotextiles 2672
directionally structured filament fabrics used for geotextiles 1128
Dornier double rapier loom good for industrial fabric production 6673
drainage geotextiles. comparison of needle punched or spunbonded synthetics, virgin synthetics or recycled fibers 6774
durable nonwovens. leading markets, volume of fabric, technology, production 6057
dyeing, finishing. water repellency, fire retardancy, protective fabrics, developments 327
Dyneema SK 60 super strength fiber and dirigible construction project 8098
engineered warp knit products for use as geotextiles 2683
EniChem technical fibers and textiles. uses in firefighting, automobiles 4068
Enka. silica fibers containing silicon dioxide for temperature resistant and nonconducting industrial textiles 5625
epoxy resins, filtering. hydraulic resistance of filter cloths 5131
ethylene geomembrane installed to protect pipe slippage from erosion 1129
evaluation of geotextile characteristics for drainage layer suitability 6775
fiber reinforced composites for aerospace applications. fracture toughness of brittle epoxy resins 6008
fibers used for industrial textiles. properties 3202
filament winding to reinforce cores. computer simulation results in reduced time and materials consumption 3406
film, Tedlar from Du Pont. polyvinyl fluoride for awnings 6760
filter media, fibrous nonwoven. structure and mechanisms 5998
finishes, spin. effects on coated industrial fabrics 6039
finite element analysis to calculate geotextile reinforced earthwork deformation 7830
fire retardant fabrics for airplane use, FAA regulations 6776
Fothergill Engineered Fabrics. thermal insulation fabrics for industrial applications (Trade Lit.) 8406
fracture behavior of E-glass/polyester composite crack arrestor 6009
future. developments. textile science and engineering 6029
geocomposite drains. testing, comparing products 7831
geogrid reinforcement between granular layer and clay substrate in test model evaluation 7832
geogrid. tensioned membrane function on peat subgrade 7764
geogrid/geotextile reinforcement in bridge embankment 7766
geogrids used in soil reinforcement 7765
geogrids. definition and specifications 3028
geomembrane lining system to contain ash from incinerator 7767
geomembranes used in heap leaching 1130
geomembranes. promotion and applications 3188
geosynthetics in drainage control at waste impoundment site 3029
geosynthetics used for leachate system at Arizona copper mine. detection and repair of leak 3030
geosynthetics used in construction of Alaskan road 7768
geosynthetics used to stabilize soil embankments on Cochrane Bridge in Alabama 7769
geotechnical fabrics. products guide and industry directory 1087
geotextile composites of polypropylene and polyester by Akzo 1058
geotextile dam reinforcement. addition of steel wire mesh to complete sufficiently rigid structure 7777
geotextile filtration fabric structures in drainage applications compared 6781
geotextile foundation treatments and anti-piping barriers in Tucurui Dam, Brazil 7773
geotextile interlayer for roadbeds. deformation tests for traffic and thermal conditions 7855
geotextile layer linked to gravel bed in railway subgrades via computer model 7778
geotextile mats. chemical and damage resistance, creep. limiting factors to load bearing for soil stabilization 7528
geotextile membrane reinforced sandy soil. mechanical behavior simulated 7854
geotextile membranes. impoundment for wastewater generated by olive processing 1541
geotextile microstructures. mechanical behavior testing for Texsol, Tensar, Armater, Nidaplast products 7837
geotextile nonwovens. load bearing capacity determined 7525
geotextile parameters for optimum reinforcement of unpaved roads 7789
geotextile performance in roadbed aggregate design, review 6779
geotextile polypropylene liner in concrete storage tank for contaminated brine from petrochemicals 8664
geotextile polypropylene nonwoven under dike across retaining pond for run-off from coal mine 8665
geotextile reinforced soil systems. elastic stress/strain behavior modeling 7840
geotextile reinforcement calculated for earth slab derived from inner and outer stability 7771
geotextile reinforcement fabrics. bearing capacity determination in strip foundation arrangement 7529
geotextile reinforcement fabrics. costs analysis for proper selection 7760
geotextile reinforcement of Finnish coastal area. design decisions and winter ice utilization 7781
geotextile reinforcement of leaves in the soft soils of Louisiana evaluated 7785
geotextile reinforcement on roadbeds with light aggregate fill on peat soils 6778
geotextile reinforcement. analysis of equilibrium under earthquake loading stresses 7838
geotextile reinforcement. embankment in waste disposal area 7775

geotextile reinforcements. calculation of minimum transmissivity with finite element calculation 7836
geotextile reinforcements. model developed to predict synergistic behavior of geotextile and soil subgrade 7834
geotextile separator fabrics examined for progressive deterioration in road use 7770
geotextile subgrade reinforcement of railway courses 7784
geotextile testing with geotechnical centrifuge 7833
geotextile vertical drains as replacements for conventional sand drains. design parameters 7774
geotextile-reinforced retaining wall. causes of failure 7787
geotextile. synthetic drain envelope effectiveness. evaluation model 6782
geotextile/soil systems analyzed with elastoplastic element added to elastic laminated plate theory 7851
geotextiles and geogrids. role in embankment construction on Delaware River project 7779
geotextiles and geomembranes. comparison of properties and test methods 3533
geotextiles as drain elements in small earth dams 7042
geotextiles as road reinforcement substitutes in resource poor regions 7772
geotextiles for railway reinforcement compared to traditional reconstruction by Swiss Federal Railway 7786
geotextiles for reduction of railway ballast compression 7783
geotextiles for roadbed reinforcement. influence of fabric type, placement, and anchoring 7782
geotextiles in German railways, waste disposal, highway engineering 328
geotextiles in soil. liquid flow behavior study 2675
geotextiles reinforcing embankments. calculation of limit equilibria, comparison of methods 7852
geotextiles used to reinforce highway embankment over peat deposit 1132
geotextiles with polypropylene geomembrane coating for rebuilding breached dam 7788
geotextiles, needle punched. fluid flow 6052
geotextiles, needle punched. puncture resistance 6059
geotextiles, review of new applications 2619
geotextiles, woven and nonwoven. fatigue relationship evaluated 7835
geotextiles. applications in India 8668
geotextiles. ASTM wide width strip evaluation for tensile strength 7841
geotextiles. creep and relaxation behavior data challenged 6777
geotextiles. cyclic loading trials to determine best road reinforcement 7526
geotextiles. directionally structured fiber fabrics 1131
geotextiles. dynamic loading characteristics in road construction 7530
geotextiles. fabric types, property requirements for separation, reinforcement, filtration, drainage, moisture barriers 8399
geotextiles. field tests as railway bed separating elements 7817
geotextiles. functional requirements. testing considerations 6780
geotextiles. functions 3534
geotextiles. history, growth, applications 7790
geotextiles. lab and field testing differences, practical modifications 7839
geotextiles. mathematical model for determining minimum requirements for desired roadbed characteristics 7842
geotextiles. optimum bonding, stitching and seam formation 7686
geotextiles. permeameter flow testing of nonwoven geotextiles for drain envelope applications 7092
geotextiles. polymer characteristics and their effect on soil reinforcement 7527
geotextiles. polypropylene. spin finishes from Schill & Seilacher 6146
geotextiles. protective clothing. German research 7671
geotextiles. raft foundation and pipe under embankment as models for load redistribution 7853
geotextiles. temporary filter, separating layer, and granular filter substitute applications in dam project in Morocco 7776
German manufacturers, institutes, and trade groups work to promote use and establish standards. geotextiles 8669
Girmes thread linked double wall fabric from high tenacity synthetic yarns 1126
graphite and carbon textiles from Le Carbone-Lorraine (Trade Lit.) 7482
graphite fluoride fibers. synthesis, properties, applications 1829
gray goods market. cotton sheeting, drill, twills, ducks, print cloth activity 2659
greenhouse heating mats of warp knitted hollow fibers 3535
heat insulation plates from latex-backed carpet wastes 8400
heat reflective fabric with aluminized face. Reflespace. France 8401
high tear load fabrics, tensile testing on PD-40 and adaptation mechanisms 5468
highway approach embankments. geotextiles and reduction of lateral stress 6783
Hoechst's line of manmade fibers 4841
Hungary's TEMASOL and TEMADRAIN geotextile products and applications 7760
ICI selling Terram geotextiles business to Exxon Chemical 6769
IFAI show highlights 1868
interactive design of geotextile fabrics according to application requirements 7531
International Nonwovens Technological Conference [1987] 5972
International Nonwovens Technological Conference [1988] 5971
investment strategies in the nonwovens industry 1153
IRL rapier loom from Wilson & Longbottom 5883
isotropic felts. new randomized fiber deposition system 8343
ITMA [1987]. warp knitting machinery 5085
Japanese technology and competitive strategy in world market 7104
job costs in marine products industry 8772
Karl Mayer RS 2 DS-V raschel machine 8325
Kemafil process recycles products for industrial applications 3551
Kiwalite and Ref-Lite from BE-SEEN Products, retro-reflective materials 326
knitted fabrics. Techtextil. gaps in information presented by manufacturers 267
knitting machinery. developments at ITMA [1987] by Liba and Karl Mayer 6678
laminates. films, reinforcing fabrics, processing machinery developments 1059
laundering. the move to laundering from drycleaning. reasons, tips 6207
leno weave. LLW 4 circular loom by Lenzing 5874
Leolene. high tenacity multifilament yarn 5673
lightweight fire blocking material used in aircraft. from Teikoku Sen-I Company 8402
limited-use protective clothing. fabrics. construction 4622
lockstitch and chainstitch sewing machines for industrial fabric products compared 6197
Loerrach Technical Textiles. transition to computerized operation 8802
looms, cam cart shaft and mechanical rotary shaft, from Dornier 4182
machinery showcase for industrial fabric manufacture, seventy-five new products 5965
magazine weft raschel machine RS 3 MSU-V from Mayer 1029
making-up. machinery trends 6191
Mammoth Mat steel reinforced polypropylene for temporary roads 7761
manmade fibers and their properties. technical applications 7539
marine buyer's guide. product directory 4367
marine buyer's guide. supplier directory 4366
marine fabric makers. new business strategies 4368
marine market report. [1988] to be good year 4365
medical, geotextile, agricultural uses of manmade textiles 7532
meshes for reinforcement applications from Kirson 3536
meta-type aramids. heat and flame resistance and applications 6497
metallic fabrics. production and application 1146
microfiber wiper cloths 8387

microglass from Bayer 8053
mineral wool slab construction incorporates drain 2676
Mirafi 500 polypropylene lines oxidation lagoon in Louisiana for treatment of wastewater 7762
modeling geomembranes with encapsulated clays for water filtration 7930
multiaxial technique and structures. applications and manufacture 6651
needled fabrics, geotextile applications 3541
needlepunched fabric with Inidex flame retardant fiber 2689
needlepunched geotextiles from synthetic fiber wastes 2677
NESA convention, total illuminated awning service packages and other products 6036
new products showcase from Industrial Fabric Products Review. international 3486
nondestructive testing of carbon fiber reinforced composites used in airplanes 6307
nonwoven industry. investment strategies 1157
nonwoven polypropylene mats for land protection during heavy construction 7791
nonwoven products for protection of crops 345
nonwovens and woven fabrics in industrial textiles. applications 6808
nonwovens applications in agriculture 344
nonwovens in geotextiles. Industrial Fabrics Association's convention 5995
nonwovens in horticulture. screens for climate and energy regulation 346
nonwovens industry in Great Britain. recent developments 6724
nonwovens industry. international market situation 1133
nonwovens sales and applications in geotextiles and roofing 3034
nonwovens. geotextiles, filtration, roofing, coated fabrics, protective clothing 2626
Norafin process for nonwovens from VEB Technotex 5973
nylon 6 (Kapron) and polyester multi-ply yarns tested for use as industrial fabrics 178
nylon ballistic panels. penetration by fragment simulating projectiles. mechanism 2693
open-cell and closed-cell foams for marine cushions. differences and general preference 4362
packing sack production in Soviet plant. extruders, winding, warping equipment, raschel machinery used 3526
parachutes. use of Kevlar and nylon materials. guidelines 7533
personal flotation devices. standards 4623
plastic roof sheeting materials. quality indicators. standardization tests 329
polyacrylonitrile used to synthesize electrically conductive fibers 5646
polyamide carrier fabrics, polyester woven fabrics for lifeboats. Polish 1766
polyester bags for railroad sleeperbeds. performance under field conditions 7792
polyester yarn production. optimization with Rieter J 3/10 draw-winder 8141
polyester, polyamide, and filament rayon textiles. industrial applications, fiber properties and industrial projects 1134
polyester, producer colored. Eastman and Kanebo joint marketing 4860
polyether ketones, aromatic. properties and applications 5683
polyetherketone fibers. properties and applications 8085
polymer dispersions. thermoplastic and thermosetting polymer dispersion mixtures and parameters 3300
polymer geogrids. reinforcement of unique non-wall slope faces 7844
polymer nets used to reinforce sandy soil. behavior study 7843
polypropylene fibers, Krenit. structure and properties, for cement-based materials 5684
polypropylene geomembranes as road surface dressing 7793
quantification of sacking material quality 3833
radio frequency heat sealers for joining thermoplastic film or sheet materials 3487
rapier. double. Dornier machine for technical textiles 5013
rapier. technical textile production with Dornier weaving machine 4181
Raufil PVC-coated monofilament bundle yarns from Rehau 3660
rayon acetate production threatened. polyester possible substitute 4051
recycled synthetic fiber waste used in medical and geotextile fields. technology, methods 3543
Redlon polyethylene geogrids in Mexico City airport runways 7523
reservoir membrane liner in Cincinnati Water Works 8666
resin impregnated, semi-rigid open grids of filament glass fibers for reinforcing roads and pavements. Bay Mills 1053
rigid inflatable boats. USARIB design uses fabric of Spectra 900 polyethylene from Allied 2678
robotics, key factors before installation 6360
roofing materials, from organic felts to spunbond polyester 4645
roofing materials. bituminous polyester rolls. developments in Western Europe 330
roofing materials. felts, glass fiber, and bitumen in United Kingdom 331
roofing membranes, nonwoven polyester. strain energy failure models 6040
roofing reinforcements, Combitex 3028 from Straet Company and Bay Mills 8403
roofing. carrier materials for bitumen-felt roofing. market shares for different materials 332
RS 3 MSU-V Raschel machine. industrial textiles 5087
safety fabric resists cutting, stabbing and impacts. Sorbtex fabric with special suction properties 333
safety net protects against flying window glass. Monarch Textiles 8404
sewing thread used in marine canvas products 7394
shear strength of geotextile/soil interface. influence of fabric geometry 7534
soft clay stabilization. geotextile support of berms 6784
soil structure and geotextile filter envelope performance 6785
Spectra welding curtain absorbs, filters, and scatters harmful ultraviolet radiation and protects co-workers 3954
spunbonded fabrics from polymer systems. Tyvek. Trevira. polypropylene. production methods. end-uses 7546
spunbonded Lutradur. plastic reinforcement. Lutravil 6085
spunbonded road interface prevents cracking 8405
Spunlace fabrics. production process and applications 6075
synthetic and new technical fibers, industrial applications 5685
synthetic fiber innovations at Techtextil 4786
synthetic fibers by Hoechst. new markets and product growth 4057
Techtextil Trade Fair, Frankfurt, technical fabrics, fibers 6421
tents and backpacking equipment from Bill Moss. profile 1135
tents, cleaning tips. Spring Expo hosted by Van Tents and others in special events industry 6041
Tex-o-Drain filter from Texel. needlepunched polyester sandwiched around polyethylene core 6770
textiles for agriculture and horticulture 352
textiles in building and construction applications 6786
Textolite production, replacing cotton bases with polyester woven fabrics 369
textured yarns replacing spun yarns in technical fabrics, apparel markets 8222
textured yarns replacing spun yarns 8220
thermal and adhesive bonding techniques. welding 3508
thermoanalysis of geosynthetics 7535
thermoplastic matrix in continuous fiber reinforced composites 1050
thermoplastics with tack. fabric production methods 5987
Third International Geotextile Congress proceedings 7965
time-of-flight C-scanning to inspect composites used in aerospace 3830
tire cord adhesion testing. samples prepared by cold bonding 6325
tire cord adhesion testing. samples prepared by hot bonding 6326
Toray develops superfine filament for lens cleaner 6531
trends and markets 1433
trials for determining granular soil structures and models of geotextile behavior 2679

trim market in the automotive industry, use of industrial fabrics. industry future 6787
Tygatherm, surface heating fabric, flexible. Fothergill 1057
Typar's polypropylene spunbond for geotextiles 8413
Uniflo U-501 from Vetrotex. manufacture of pultruded products 6741
United States industry. [1987] review, [1988] forecast. industrial fabric products index 1127
United States market analysis by Frost and Sullivan 2673
United States market. growth predicted 3404
United States market 5140
valances, screen printing methods to create decorative borders 3805
vertical wick drains installed at Puerto Rican construction site to consolidate soils 3031
vinyon. properties and applications 6042
Viscostat and Viscarbon. viscose fiber containing carbon 6555
warp knit fabrics. range of industrial uses 5911
warp knit 8294
wastes used in nonwoven geotextiles. fabric properties 1068
water conductivity of geotextiles. permeability coefficient versus hydraulic loss discharge 7093
weaving systems at [1987] ITMA. multiaxial warp knitting and raschel machines. Liba and Karl Mayer 5966
wet form nonwoven fabrics for filtration and reinforcement 4295
winder, EKS6D. Barmag. industrial yarns 5839
woven geotextile mats as floating embankment in Turku, Finland 7794

INDUSTRIAL HEALTH AND SAFETY (SEE ALSO OTHER HEADINGS, SUCH AS AIR POLLUTION, ASBESTOS, DUST, ENVIRONMENT, FLAMMABILITY, HEALTHCARE AND MEDICAL TEXTILES, INDUSTRIAL ENGINEERING, LEGISLATION, NOISE, REGULATIONS)
accidents, fire and chemical. prevention and fighting concept from Sandoz 5494
accidents, fire and chemical. prevention and fighting 5493
acetoquinone and dispersol dyes. potential hazards and handling precautions 753
AIDS in the workplace, factors and guidelines 7916
Amalgamated Clothing and Textile Workers Union's charges against OSHA regulations on worker exposure to formaldehyde 3084
ambient ionization in spinning and weaving sheds. effect on sanitation 5553
asbestos in ambient air determined by microscopy methods 3066
asbestos insulation workers. occurrence of benign pleural effusions 7917
azo dyes and dye intermediates. design of non-mutagenic dyes 7906
azo dyes. EPA testing of C.I. Disperse Blue 79. biological wastewater treatment systems 7907
bacterial, fungal concentrations in British cotton mills 7918
Batelle designs robot to test protective clothing in simulated, hazardous conditions 7097
boarding. Sockpress C from Heliot 7659
byssinosis in workers. reduction of workplace cotton fly levels and corresponding drop in incidence 8863
byssinosis. measurement of endotoxins from cotton 4758
cancer victims who worked in dye houses. program to rid workplace of cancer causing chemicals 1539
ceramic fibers. potential hazards, toxic effects 7309
chemical protective clothing and equipment. summaries of Federal research programs 7730
chemical storage. fire prevention 5495
chemicals, toxic. community right-to-know. SARA Title III (Conf. Paper) 8850
circular knitters, safety evaluation of their designs 4255
Control of Substances Hazardous to Health regulations and effect on British drycleaners. regulation of perchloroethylene 6215
cotton dust and impurities. West German method to determine impurity of cotton 5451
diisocyanates, tolylene. safe handling guidelines. clinical results 7197
Disperse Blue 79 degradation in the waste activated sludge process 7905
Downflow or D-Range dust control booth and filtration for safety in dye house 5548
drycleaning. hydrocarbon gas safety testing apparatus from Draegerwerk 3859
dye wastes entering landfill via sludge from biological treatment plants 7911
dye wastes removed via electrochemical cell. chemistry, costs. pilot studies 7910
dyeing industry. dust control system, Sintamatic filtration system 5547
East German study on computer workstation working conditions in the textile industry 3924
effluent load reductions, other benefits from changes in dye and dye intermediate manufactures 7912
emblem removal with dimethylformamide. methods and safety 2070
Endotoxin Inhalation Workshop [1987]. cotton dust and byssinosis studies 8964
endotoxins causing byssinosis denatured by various solvents 7276
fluorescent whitening agents. developments. product safety. testing. photochemical behavior 3664
formaldehyde, OSHA standard. industry reaction to cancer warning labels on fabrics and apparel 3955
hexamethylene diamine. structure. uses. toxicity data 2717
humidification and heat loads 7190
ITMA [1987]. auxiliary weaving equipment 1757
Kroy process. safety equipment to contain chlorine gas 8827
limited-use protective clothing. fabrics. construction 4622
mothproofing. active ingredients. environmental concerns 5303
New York State's regulations on filing combustion toxicity data 2317
OSHA's new formaldehyde standard, apparel manufacturing executives attend workshop about new standards and regulations 4757
reduction of disperse azo dyes in bottom sediments in the environment. potential hazards 7914
security control device, Cerberus CZ 12 unit 7192
shop towels versus disposables in industrial wipes market 2155
sorption isotherms. azo dye fate predictors in activated sludge wastewater treatment process 7915
spark remover, JOSSI FA/S, for plant air conduits 6372
Spectra welding curtain absorbs, filters, and scatters harmful ultraviolet radiation and protects co-workers 3954
standards from the United States Labor Department. worker exposure to chemicals used in textile and apparel industries 5551
steam injection. noise control measures to comply with EEC directive 5552
tannery solvent, dimethylformamide. ACTW seeks cancer causing label 1540
textile dyes and pigments. industrial hygiene and safe practices 754
textile dyes and pigments. potential hazards and handling precautions for cuprodiazol, diazol, procilene PC 755
United States shop towel suppliers listing. sizes, fabrics, colors, delivery time 2199
ventilation, cooling in a drycleaning plant, health and productivity of employees 6380
ventilation. emission and waste heat removal for drycleaning operations 3952

INFORMATION (SEE ALSO OTHER HEADINGS, SUCH AS COMPUTERS AND PROGRAMMING, LEGISLATION, MANAGEMENT, TEXTILE TECHNOLOGY, TEXTILE TERMS)
AATCC Technical Manual of textile testing procedures (books) 7957
Alabama Textile Manufacturers Association elects new president, Bernard R. Wedge. other officers 7211

American Apparel Manufacturers Association, new board members 7208
Apparel International's [1988] buyers' guide to products and services 2806
apparel manufacturers in the United States, heavy uses of information technology 2281
ATMI, Daniel K. Frierson elected president. his background, and other officials 4791
bibliographic sources. Textile Technology Digest and World Textile Abstracts 8969
big and tall men. survey from United States on height, weight of sample civilian males 1590
buyers' guide to firms serving South African industry 2865
Carpet and Rug Institute's industry-wide shipping label, uniform access system to computer network 7037
code changes for awnings. process, key design buzzwords 6262
Colour Index International. dyes and nomenclatures 7958
Colour Index International. supplemental dye and colorant technical, structural information 7959
computerized information system for textile mill 7153
data analysis model for computer integrated manufacturing 8812
design causes forty percent of quality problems. solutions 7168
development of a textile-oriented expert system 7149
dyeing, finishing terms. Textile Dyer and Printer textile dictionary 8965
East German studies on computer aided manufacturing in industry 3923
economy, manufacturing, and technological development seen as critical to national security 3190
Elisha named Textile Leader of Year [1988] by South Carolina Textile Manufacturers Association 7212
Exxon to purchase ICI's geotextile division and Terram-producing plant 6549
German and English knitting, knitting machine technical vocabulary 7970
German Dyers' [1988] industry yearbook 2714
Girmes installs comprehensive information processing system 8800
INDA nonwovens handbook on products, manufacture, growth of industry 7971
INDA/EDANA [1988-1989] nonwovens directory 7972
India's weak industrial policy fails to upgrade old units 7225
Industrial Development and Site Selection Handbook survey 3189
ITMA [1987]. computer integrated manufacturing 2291
lost and non-recorded academic and industrial research information. system to collect, catalog, and disseminate 1597
management information systems from different companies for apparel and textile industries 3913
manmade fibers, specialty and high performance fiber type, manufacturer 6520
monitoring and data collection. Cericont system 8814
organic colorants for optical disk memory 3991
quality control of apparel products based on shared information between textile manufacturer and apparel industry 6235
Quick Response system used by Haggar 6231
Quick Response. Electronic Data Interchange, Universal Product Code, role of Textile Apparel Linkage Council 1548
reorganization of CETIH, an information, research, and development center for the French industry 2808
research and data collection in laboratories and offices 6357
role of trade representative as disseminator of information between commercial and industrial concerns 3979
sciences and disciplines of information study 7973
Spinning [2000] report from Battelle Geneva Research Center 5760
standards adopted by Textile Apparel Linkage Council. distribution and transportation, shipping label, packing guides 1591
technical journals for companies to remain competitive 8974
Textile and Apparel Machinery Modernization Foundation (TAMMF). formed to create standards for factory computer communications 3990
textile machinery, equipment, and chemicals. international buyers' guide 7252
textile operations and computer archiving and networking 3191
textile terms, processes defined for dyeing and printing. diffusion, starches, clays, Van der Waals forces 4400
trade names of textile finishing products from Chemox Industrial, C. D. Corporation 4792
United States and European textile industries. [1986] rankings, mergers and acquisitions 3871
United States made apparel preferred in survey of United States adults 5590
United States made clothing preferred by American consumers, study shows 2950

INFRARED, SEE DRYING, SPECTRUM ANALYSIS.

INORGANIC FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS ARAMID FIBERS, ASBESTOS, BICOMPONENT FIBERS, BLENDS, CARBON FIBERS, COMPOSITES, GLASS FIBERS, METALLIC FIBERS)

ceramic fiber from Shimadzu. high strength and heat resistance 1659
ceramic fibers as reinforcement in thermoplastic composites 4316
ceramic fibers from liquid phase. Clinotherm concept 8056
ceramic fibers with cyanosilicate groups from inorganic precursors (Abstract) 8060
ceramic fibers. high modulus 7332
ceramic fibers. polymers prepared from organosilicon starting materials. defects 4875
ceramic. Rath's new Moenchengladbach plant 5638
literature review. manufacture. structure. properties 2463
refractory board produced from zirconia fiber combined with specific inorganic binder. vacuum molding process 1669
silica. LT and HT from Enka. properties. applications 8087

INSECTPROOFING

evaluation of Bayer and Ciba-Geigy insectproof finishes 4488
mothproofing. active ingredients. environmental concerns 5303
wool digesting insects. insect resistant agents. application methods 3662
wool. chemical analysis of traditional insect resist agents 3065
wool. problems with mothproofing agents. Flucofenon and Sulcofenon used as substitutes 3663

INSPECTION (SEE ALSO OTHER HEADINGS, SUCH AS METAL DETECTORS, MONITORING SYSTEMS)

automatic fabric inspection system. Camera System LC 900 from Erwin Sick 1090
Bobbin Show [1987]. fabric inspection and chemicals 652
BSM optimizer by Calator. tensionless handling of weft knits for final inspection 1455
Erwin Sick Optik LC900 system for automatic fabric inspection 6022
Fabric Inspection and Grading. book review 653
fabric inspection machine, Uster Visotex 5951
fabric inspection. automatic. development from Japan's TRASS 5348
IMB [1988]. highlights 8587
industrial fabrics. making-up trends 6191
Knitscanner for knitted piece goods by Novakust 6192
Kuris. computerized fabric inspection and cutting system 6186
laser goniophotometer inspection of spot bonded fabrics 3832
Lindly inspection products for textile industry 654
machinery. computerized management of defects. innovations shown at ITMA [1987] exhibition 7869
narrow material inspector. Model 1210 from Lindly 669
optical fabric inspection. Forum for Textile Finishing Processing Technology 6092
Optocator laser triangulation probe for measuring thickness of carpets 3061
Original Hanau Fluotest lamp for UV-inspection of fabrics 3834
pattern recognition of fabric on digitized surface. Hough transformations 7829
SICK Automatic Surface Inspection System for flat weave fabrics 1068

Sick Optik's two phase, automatic laser scanning inspection system for nonwovens 2292
SICK Scan System for woven fabric inspection 1089
systems shown at ITMA [1987] Paris from various manufacturers 5532
textile product damage and hidden defects, improper care labeling 3799
visual, fabric. improvement with Unilux strobe light 8821
warp shed angle. ATIRA warp Shed Protractor 8260

INSTRUMENTATION (SEE ALSO OTHER HEADINGS, SUCH AS AUTOMATION, COLOR MEASUREMENT, COMPUTERS AND PROGRAMMING, ELECTRICAL EQUIPMENT, TEXTILE TESTING, AND UNDER SUBJECT HEADINGS OF SPECIFIC PROCESSES)
ADC 100 automatic/progressive alkali metering system for reactive dyeing 8499
air permeability tester. Flotec from Enka 3055
automatic fabric inspection system. Camera System LC 900 from Erwin Sick 1090
carpet damage. analysis and measurement 675
chromatic and geometric properties of textiles. measurement 4422
clothing pressure. wireless measurement apparatus 8632
color measurement, control equipment and instruments. recent developments 2737
colorimetric devices at [1987] ITMA. computer-aided, on-line optics 4688
comparison of yarns and prediction of quality from HVI and Shirley Analyser trash testing 7058
compression resilience tester. applications in fiber, fabric testing 8677
Computer Aided Tensile Testing System developed by Du Pont and Instron 1468
controls, testing equipment, instruments. recent developments 2715
cotton fiber length and diameter distribution. prototype measuring instrument 7050
cotton fiber quality evaluation developments 8680
cotton fineness, maturity testing. Shirley Development's FMT and compatibility with HVI testing 8681
cotton samples. comparison of different video trashmeters used in quality control 7053
cotton testing equipment, applications and consequences 8682
cotton. scanning type trashmeters. modified to provide trash particle size information 7054
Datacolor colorimetric system in Soviet wool institute. uses, deficiencies 5207
developments in slub yarn systems, dryers, dyeing machines, packing systems 743
digital multifunctional yarn twist tester. BTRA 8697
drafting force metering instruments. DDL Tester from Spinlab 936
draw frame cylinders, device to measure pressure 8163
dyeing and finishing instruments for measuring. role of sensors 8822
dyes measuring viscosity of liquid dyes 7625
equipment, laboratory, and dye and finish formulation at [1987] ITMA precision of control 4401
evenness tester Keisokki KET80. computer control 8701
fabric density. automatic measurement device 3060
Fiber Image Display and Measurement. mean wool fiber diameter 7805
fiber/resin ratio of advanced composites. nondestructive determination by ultrasonic technique 4672
filament yarn testing for high speed weaving 1452
fineness maturity tester Model III/HVI from Shirley Institute 814
G-Mex Textile and Technology exhibition in Manchester. highlights. post-ITMA developments 4744
G-Mex Textile and Technology exhibition. post-ITMA developments in quality control and testing equipment 4648
HVI 3500 and HVI 4000 Fiber Information Systems from Motion Control 812
HVI and Stelometer strength measurements. usefulness of measurements to cotton breeding program 7048
HVI cotton fiber testing. drawbacks and potential 8679
HVI design factors. strength level measurement differences compared to reference measurements 7049
HVI testing and blending. advantages at Cone Mills 7154
HVI, Pressley, and Stelometer. cotton fiber extension rates. effect of strain rate on strength of fibers and yarns 7056
hydrocarbon gas safety testing apparatus from Draegerwerk 3859
ICS-Texicon DS-3 laboratory microdosing measurement system for liquids 3937
IIC-Shirley Fineness/Maturity Tester 5452
inspection of knit fabrics. Novakust Knitscanner 7430
interfacial strength of advanced composites. Interfacial Testing System 4674
International Textile Machinery Exhibition [1987]. automation and instrumentation 6629
ITMA [1987]. auxiliary equipment, transport, testing systems 7178
ITMA [1987]. companies and products 2310
ITMA [1987]. preview. technical information 7898
ITMA [1987]. textile testing trends. raw materials, linear textiles, textile fabrics 1436
James H. Heal's Deltamoist meter. measures regain 6327
Jordan, Lovatt, and Jones manufactures replacement controllers, retrofit devices, and inspection machines 4243
Keisokki Classifault II system for classification of yarn faults 972
knitting force test device for obtaining information on yarn behavior during stitch formation 7441
laboratory dyeing machinery and processes from Ahiba 6125
Lawson-Hemphill continuous yarn tension tester 7100
Lindly inspection products for textile industry 654
liquid flowmeters, types. operating principles 3039
measuring dye viscosity 6918
measuring moisture. BTRA CM-1 and VM-1 portable testers for cotton, viscose processing 8683
Micro Sensors M/8000 online tester for filament yarn diameter 8702
microprocessor-based quality and process control systems in Indian textile industry 7890
narrow material inspector. Model 1210 from Lindly 669
neps in cotton fiber. new instrument and method for automated counting and sizing 7052
Original Hanau Xenoflash 150S tester. Model 150 comparison 7848
shear in fabrics 7079
Shirley yarn hairiness meter 7809
SICK Automatic Surface Inspection System for flat weave fabrics 1088
SICK Scan System for woven fabric inspection 1089
Soviet photoelectric non-contact sensor for linear density measurement 4662
static and kinetic yarn friction. measurement method 3047
stelometer testing versus HVI line testing. comparison of results, levels of accuracy 7055
tensile strength testing instrument with multiple cop change 8692
test equipment for textured filament yarns from Rothschild Instruments, Shirley Developments, Textechno-Herbert Stein 8691
testing cotton stickiness due to aphid excretion 5454
TRI Liquid Breakthrough Tester CS-244. Custom Scientific. penetration of liquid through fabric system 3059
vibration measurement. applications as practical maintenance regimen 7903
Video Speed Master. remote measurement. length and speed of nonwoven fabrics 8720
video trashmeters and Shirley Analyzer results compared for non-lint content of cotton samples 7057
viscose gel particle content. FS-112 analyzer 5449
yarn deformation test methods. German research 7797
yarn hairiness. Zellweger Uster Tester 3, test method 4665

INSULATION (SEE ALSO OTHER HEADINGS, SUCH AS ENERGY, HEAT PHENOMENA)
aluminum coating of polyethylene terephthalate fabrics, production 5318

carpets, latex-backed. waste used in heat insulation plates 8400
ceramic fabrics, insulations, and metal foils quilted using ceramic thread. insulations for aerospace vehicles 5138
compression in nonwoven insulating fabrics as a function of effectiveness 6752
curtain fabrics. thermal insulative performance 2680
fabrics and fabric assemblies. thermal transmittance and air permeability assessed 6278
Favor-C polymers from Chemische Fabrik Stockhausen 7043
Fibersil. woven ceramic textile containing alumino-silicate fibers with noncombustible properties 5991
Fothergill Engineered Fabrics. thermal insulation fabrics for industrial applications (Trade Lit.) 8406
graphite fluoride fibers in composite fiber structures. high thermal conductivity material 7498
high performance elastic fabric for winter sports. WB 400. Schoeller 8378
hollow fibers. temperature adaptable. patent application and insulation properties 7335
insulative fibers for effective thermal wear (Conf. Paper) 8708
melt blown fabrics. Exxon process 6061
needlepunched outdoor materials. structure effects on thermal properties 7545
nonwoven membrane laminates. fabric thermal insulation and water vapor permeability 1139
nonwovens, air laid 6060
nonwovens. factors influencing thermal conductivity. new measurement methods 1456
polyester. bicomponent blends designed to replace down 886
polypropylene undergarments. comfort 1312
Primaloft. insulating material 5674

INTERFIBER COMPETITION
cotton versus synthetic weaving yarns. elasticity, break resistance, degradation 8208
drainage geotextiles. comparison of needle punched or spunbonded synthetics, virgin synthetics or recycled fibers 6774
India. synthetic fiber production outlook (to 1993) 7974
markets fragment within industry. specialization of component industries 3271
nylon/cotton union fabrics. nylon advantages over polyester 8388
pile carpet fibers. market position and performance characteristics 1602
ramie production in India. comparison to other fibers 2429
wool's improved ability to compete with other fibers, in particular manmade 7804

INTERLININGS, SEE FABRIC PRODUCTS, HOME FURNISHINGS, INDUSTRIAL ENGINEERING.

INVENTORY CONTROL (SEE ALSO OTHER HEADINGS, SUCH AS PRODUCTION CONTROL)
bar coding at Haggar for raw materials, tracking, finished goods tickets 5357
bar coding in apparel industry pushed forward by Quick Response and vendor marking 5358
bar coding inventory system from Haggar 6233
bar coding technology and scanning for apparel industry. problems, advantages 2805
Carpet and Rug Institute's industry-wide shipping label 7037
computerized planning and control, India's needs 2264
computerized systems for carpet mill. BGD Computer Systems 7881
computerized, at textile mills 5509
costs for spinning mills 8819
FASLINC standards for textile manufacturers, newly elected board members 6394
Flexible Manufacturing System for apparel manufacturers, Quick Response, lower inventories 6965
Haggar and retailers. computer applications 3878
Hungarian apparel cooperative. microcomputer for inventory and production control, orders 2293
Just-In-Time applied to sewing line 3879
Just-In-Time for inventory management (Conf. Paper) 8763
NRMA conference experts warn retailers to start electronic data interchange program slowly. distribution, inventory control 7026
ordering systems. optimum levels in inventory. economic ordering quantity formula 5511
productivity. 80/20 rule and its effect on unit production, reduced inventory 6968
purchasing 3880
Williamson-Dickie, UPC ticketing. three year phase-in program, benefits 6176

IRONING (SEE ALSO OTHER HEADINGS, SUCH AS PRESSING)
automatic feeders for flatwork finishing systems, their effectiveness 4583
ITMA [1987]. making up and packing machinery 6185
Kannegiesser Formstar for ironing just-assembled garments 6987
knitting machinery. trends in finishing. flat and foam 3563
modern flatwork finishing system, various types 4589
pleat and residual water retention and glass transition temperature 577
productivity guidelines for a laundry manager wishing to increase productivity 4580
Propress introduces new series of high-tech professional irons 4545
Severnside Fabrics' TCS antistatic folder bands for bed linen ironers. features, construction 4579

IRREGULARITY, SEE FABRIC DEFECTS, FABRIC QUALITY, FIBER QUALITY, NEPS, UNIFORMITY, YARN IMPERFECTIONS, YARN QUALITY.

ISOTACTIC FIBERS, SEE OLEFIN FIBERS.

JACQUARD, SEE UNDER SUBJECT HEADINGS OF KNITTING MACHINES, LOOMS.

JAMBOLEN IS A POLYESTER FIBER.

JETS, SEE CRIMPING, DYEING, MANMADE FIBER EXTRUSION.

JUTE
A. Twill jute bags sewn with overhead and safety stitches. correlation between strengths of seams and weftway cloth 1290
Annual Report of Jute Technological Research Laboratories 1611
bacteria and extracellular catabolic enzyme activity. softening of hard root cuttings of jute 828
Bangladesh's share of world market. decreased demand and search for new applications 7277
composite structures and jute properties. grafted and chemically modified jutes. new markets 6469
draft and irregularity in drawing slivers 5726
drafting tenacity 5615
fabrics. thermal resistance measured by double-plate B54745 method 334
global demand, [1995] outlook 2423
hairiness 5616
India. case for inclusion of raw jute in multifiber policy 1612
India. jute industry. problems, history, and research 826
India 4821
industry review. production, consumption, product developments, blends 1613
jute/polypropylene textured yarn properties 4142
liquid ammonia and caustic soda treatments on jute and cotton. comparisons 6834
low grade. improvement for increased mill utilization in India 937
moisture regain and mechanical properties. effect of chemical modification 7999
moisture regain reduced by chemical treatment 7278
new fibers, mathematical model, method for processing 4820
nonwoven textiles. properties 7544
Pakistan. growth in operating jute mills and production 827

processing. optimum balancing of machinery, case study 8000
pulp process developed at Bangladesh Forest Research Institute uses cuttings and low-grade jute 7279
research at Bangladesh Jute Research Institute 7280
spinning frame types FC522 and C561. tension analysis 133
weaving, problems. new Tegard 1001 machine by Gardella 6669
world market prices. impact of oil and polypropylene prices 2424

KANEKALON IS A MODACRYLIC FIBER.

KAPOK

KAPRON IS A NYLON FIBER.

KARBIMID IS A MANMADE FIBER.

KENAF
acoustic testing device for tear load, computer program 14
newsprint source. Kenaf International builds Texas pulp mill 829
waste removal with air jet, mathematical model, parameters 4914

KERATIN (SEE ALSO OTHER HEADINGS, SUCH AS HAIR FIBERS, MOHAIR, WOOL)
copper(II)-wool keratin complexes. formation 3146
side roller presser foot. ST-type. Shimada Machinery 8615
strength spectrum of alpha-keratin fiber 3262

KEVLAR IS AN ARAMID FIBER.

KHLORIN IS A VINYON FIBER.

KNIT-DE-KNIT, SEE CRIMPING.

KNIT FABRICS (SEE ALSO OTHER HEADINGS, SUCH AS CARPETS, ELASTIC FABRICS, HOSIERY, INSPECTION, LACE, LAMINATED FABRICS, PILE FABRICS, STITCHBONDED FABRICS, STRETCH FABRICS, AND UNDER SUBJECT HEADINGS OF SPECIFIC PROCESSES)
abrasion resistance, tests on IT-1M device 238
acrylic. Indian apparel products 8937
apparel, Vivian Chan Shaw Australian knitwear company, profile 5422
apparel. Units line for women. square shaped separates to build entire wardrobe. retailing 4602
artificial knit fur lining fabrics, thermal properties, testing 336
atlas design. demonstration of techniques 7537
Azapil photoelectric testing device for knit fabric pilling determination 4351
bagging behavior. Celanese test 6238
Brazil, knit fabric industry 5044
British fabrics. laboratory tests 2681
chemical finishing of cotton and cotton blend knits 6939
children's knit fashions [fall 1988] 4600
circular knit fabrics, spun and filament yarns. properties of integrated knits 2649
circular knitting of imitation plush and sinker lined fabrics, properties 239
circular machine of Spanish construction produces bulky knit fabrics 2605
Clover Cocktail. wool and acrylic blend capable of dissipating static in knit apparel 939
CMS machines from Stoll. new loop structures and knitted constructions 5077
complicated stitches and shapes [spring 1989, winter 1989/1990] preview. machine developments 1779
composite knit fabrics, quality evaluation method with structural change 5046
compression resistance, relation of knitting method to strength 6788
computer integration to improve efficiency in production at Richards Sportswear 7726
computer produced models for knit fabric characteristics 2599
computer programs to aid engineering of knitted fabrics 2597
cost accounting. finishing 8766
cotton knit fabrics. dimensional stability through RPR-Quality System 390
cotton knits, single faced. dimensional stability 5906
cotton. dimensional stability. production by Hungarian knits industry 8408
cotton. effect of chlorine on colorfastness. dyed with reactive dyes 395
cotton. IIC Starfish software for fabric development simulation 8801
current status of flat knitting. rethinking pattern development 6701
cutting methods for chemises to reduce fabric waste 534
damage during processing due to high sewing speeds 2038
David Valls upscale knitwear. Spanish designer, philosophy, product lines, target customer, growth strategy 2889
Dawson International. history and current status as U.K. knitwear company 3089
defects. spirality of wale lines. fabric distortion. cause. solutions 5907
deformation of cotton single jersey knits. causes and solutions 5967
design, CAD systems applications in knitwear industry 1022
dimensional stability 3462
Diolen special effect polyester filament yarns and their use in knit fabrics 3048
Directives [1989], popularity of knits in men and women's fashions, knit sweaters 8621
directory of knit apparel contractors 1361
directory of knit apparel manufacturers 1360
Du Pont's Lycra, apparel, knitting, core yarns for weaving, products from Poland 4887
Dunova modacrylic fiber in multilayer athletic fabrics 3280
dyeing and finishing machinery used for circular knitted fabrics with tubular construction 2712
dyeing cotton and cellulosic materials. reducing dyestuff consumption 7627
end use fields except apparel. examination of tricot and raschel knit velours 6690
EVAC's Ultra Knit Family of knit tensionless processing machines 3676
fashion. prominence discussed at [1987] Pitti Uomo Italia [spring/summer 1988] trends 606
fashions for men and women from Du Pont, Orlon acrylic fibers blended with other manmade and natural fibers 2536
fine knits production. various methods and machinery used 5922
finishing and applique trimmings for apparel and footwear industries 546
finishing machinery, improvements 4387
finishing. continuous processes 7561
graphic representation of knitted structures 1507
hand-finishing techniques to recreate Renaissance costumes 7687
handknit raglan sweaters 2595
handknit sweaters for children. designing 2885
handling equipment, automated system with freeze grippers 6985
hospital garments from Chalmers University 7536
Hungarian developments with polypropylene filament yarn 8407
Hungarian. ten years of changes in export structure 7936
Indian worsted industry examined for quality knitted yarn 8209
industrial textiles. Techtextil show. gaps in information presented by manufacturers 267
interfacings. fusible and sew-ins for knitwear. new products 4376
jacquard designs by Ecafil. trend to Middle Eastern motifs 8292
jacquard knits produced on the KSC-E machine by Nagata 5908
jacquard. overview of design and manufacture. need for simpler methods 8288
jersey knitting industry in United Kingdom 5047
jersey. applications, solutions 5909
jersey. circular knitting machines, SYX-3 Model from Jumberca 3475
jerseys used in sports. performance testing 8647
Jumberca's Model DJE-2 double jersey machine 4252
Jumberca. eight variations on circular knitting machines at [1987]

ITMA 7443
K values of knitted fabrics. dimensional stability 2218
knee orthosis. stocking-like stretchable knitted fabric 7743
knit 1/slip 1 stitch sequence results in weatherproof fabric 7435
knit pattern possibilities on jacquard transfer machines 7431
knit-de-knit yarns. features. crepe effect on knit fabrics 2545
Knitscanner for knitted piece goods by Novakust 6192
Knitscanner from Novakust. inspect knit fabrics in any structure, form, or size 6689
lace-edging 5048
linking machines. Kettma's four models for knit fabric joining 7688
linking systems for knitted goods making-up 6986
loop distortion. review of work published. fundamental physical parameters influencing loop distortion 4234
medical application suitability of wool and polyester knit fabrics 3537
Model EXP 146 extraction and impregnating machine from tubular knit fabrics manufactured by Heliot 8439
model SYX-3 large diameter single jersey machine from Jumberca 6702
multiaxial technique and structures. applications and manufacture 6651
MW knit fabric inspection unit manufactured by Erwin Sick for circular knitting machines 8287
New York Yarn Fair [1988] held with SOURCEAmerica for knitwear manufacturers. new products 6616
Novakust Knitscanner inspection machine 7430
nylon 6, viscose, and polyester knit fabrics for footwear linings 6043
offset printing, boot lining applications in Poland 8671
pad dyeing cotton tubular knits. the new Tubocolor by Bruckner for the modified pad-steam method 8486
pad dyeing. optimal friction data from experimental results 7628
pad dyeing. results from process variables 7609
pattern development for knit fabrics, efficient use and CAD accuracy 5373
patterns generated from algorithms 8279
Pegdry conveyor air jet drying and relaxation finishing machine for tubular knit fabrics 5320
Pitti Filati yarn fair, spring/summer, reasons behind poor attendance and sales. product trends, knit market hurt 1723
plain loops of rotor spun cotton yarns. geometry and dimensional properties 2682
pneumatic device for combining combed wool without knots. advantages for knit fabrics 3343
Polish developments in medical applications 8670
polyethylene glycol, fabric modification through crosslinking 6062
polypropylene. blends 1172
pretreatment. tenter. steaming, shrinking and heat setting ranges 401
production on Monarch's circular machines. description of FX range 8310
quality control of spun yarns 5142
rotor spun cotton yarns. area and linear properties relative to dimension 3538
Santastretch stretching and hydro-extracting machine manufactured by Santex 8574
Scheller numerically controlled intarsia/Argyle and intarsia machines. full fashioned knitwear production 2608
sewing techniques on zigzag machines 7689
sewing. fabric characteristics 2039
shirts, sports. comparison of knit and woven shirts and their popularity with young men 2917
shrinkage, knitgoods. influence of take-off 8293
shrinkage. Sanfor process. problems and solutions 6161
singeing with Pyrotrop singeing machine improves quality 4418
single jersey knit fabrics. ring versus open end spun 2221
single jersey loop pile fabrics produced from cotton pile. dimensional properties 1170
single jersey loop pile fabrics. linear and area dimensional properties 1171
single jersey production with Jumberca SYX-3. greater speed and ease 7444
sinker, latch needle system for circular knitter, design 6705
small diameter vascular graft manufactured by warp or weft knitting or weaving 2697
Sointes automatic rib knitting and bar loading machine for knitwear manufacturers 4245
Soviet flat knitting method for openwork fabrics 4236
Soviet mills. knit fabrics and apparel, fibers, designs 595
Soviet [1987], uses, structures, fiber content 335
specifications to protect manufacturers due to diversity and quick turnover in fashion market 8641
spirality in single jersey fabrics 6749
spirality problem in knit fabrics caused by twist liveliness and other factors 6789
standards and guidelines for knit upholstery fabrics 3539
Stoll CMS series flat knitting machines. surface patterns from new carriage developments 3479
Stoll VDU Selectanit pattern preparation unit 8289
streaking in knit fabrics causes, solutions 5935
stretching, affect on thermal insulation properties, measurement 5049
stripe defects. study aimed at reducing incidence of defects 1780
stripes in taffeta raschel knit fabrics. machine stops and starts 1782
synthetics. polypropylene and polyester in tricot knit fabrics. sports fabrics in central Europe 4379
take-off. forces exerted on circular knitting machine needle bar 7450
Techtextil [1987]. observations 6417
tenacity of Modal viscose/cotton blend yarns in fine weights in circular knit fabric constructions 3397
Terital Silklike. easy care polyester with variable appearance. hand, drape 8426
textured yarns with the look and feel of spun yarns 8221
three dimensional knitting using CMS flat knitting machines from Stoll 3476
Tre-Relax from Mohr. shrink dryer for tubular and open width knit fabrics 5322
trends for [autumn/winter 1989/1990]. surface details 7012
trends spun polyester products, stretch products, spandex, stretch nylon, rayon 4056
tricot and raschel knit velours 6675
tubular bandage knitted to provide more or less support as needed 1856
tubular cotton. shrinkproofing for tumble drying 6164
tubular knits. padding processes. tube break edge marking 6108
tubular. mercerization. innovations at ITMA [1987] shown by Dornier 6833
tubular. pad dyeing processes 5252
tubular. reduction with Paknit II compactor 8579
twisting. influence of various factors on twist. experimentation 5910
Universal CAD/CAM design station for flat knitting pattern development 7433
Vald. Hendriksen VH-Jet 80 jet dyeing machine. test runs with cotton, manmade, knit and woven fabrics 6889
versatility in knitting techniques 6682
viscose fibers, regenerated, and their contribution to comfort of knit fabrics 3256
Viscosuisse knit polyester fabrics for functional sportswear and travel apparel 5417
Vollenweider AG Textilmaschinenfabrik's Pyrotrop singeing machine for knit fabrics. pilling resistance 2732
Vollenweider's Pyrotrop singeing machine for open and tubular knit fabrics 4415
warmth. thermoregulatory properties of various interlock fabrics 2801
warp. linings. construction, classification 8596
washing, shrinking equipment at [1987] ITMA 7562
water retaining properties of viscose fibers in knit fabrics 1685
wearer comfort of knits and cumulative effects of soiling and washing 6790
wire cloth trapped in polymer material for barrier to electro-magnetic radiation in computers and microwave

antennas 8409
wool roving/blended with Kapron and other synthetic yarns using flat knitter 5060
wool. humidity and pilling 8744
work gloves. Hungarian industry combines experience and new technology 8298
working with hollow spindle effect plied yarns in knit outerwear 3399
yard goods finishing. problems, solutions at [1987] ITMA 6086
yard goods. production. new developments in circular knitting machines 6703
yarn defects and unevenness. relation to performance and product quality 7436

KNIT FABRICS--WARP
applications growing. technology, products, markets, horizons developing 3463
AQ Industries. warp knitted fabrics, intimate apparel. fifty year retrospective 2601
compression resistance, relation of knitting method to strength 6788
curtains 8663
Directionally Structured Filament (DSF) fabrics. applications as geotextiles 2672
DV 6 DUM warp knitter. products, uses 5082
engineered warp knit products for use as geotextiles 2683
fabrics. range of uses in industrial textiles 5911
flax/polyester (Lavsan). blend yarn and knit fabrics 4369
formula for warp knit fabric development from filament yarns 6691
greenhouse heating mats of warp knitted hollow fibers 3535
industrial fabrics applications 8294
medical, geotextile, agricultural uses of manmade textiles 7532
multiaxial fabrics 5110
multiaxial raschel knit fabrics reinforced with glass roving 5050
net curtains. raschel technology 5447
polyester, acetate and nylon 6 blend fabrics for sports apparel 337
polyurethane/cotton/nylon 6 underwear fabrics, warp knitting 242
raschel home furnishing fabric. computerization of card puncher 8300
raschel. Karl Mayer RSE 11 EH for embroidery-like patterns 7460
RS 3 MSU-V Raschel machine. industrial textiles 5087
specialty fabrics from Tuellindustrie 2663
tricot HKS 3 machine from Karl Mayer 5083
tricot. sports apparel. thermophysiology and moisture transport 5154
Type RS 3 MSU-V raschel machine manufactured by Karl Mayer for production of nonwovens with warp-knit reinforcement 8411
velours. German warp knitting industry bid for wider acceptance in auto, apparel markets 7432
warp knitted fabrics, surface effects through pigment printing 3643

KNIT-WEAVE PROCESS
Metap fabric and computerized design, program based on surface density 5096

KNITTING (SEE ALSO OTHER HEADINGS, SUCH AS ELASTIC FABRICS, HOSIERY, KNIT FABRICS, LACE, STRETCH FABRICS)
atlas design fabrics. demonstration of techniques 7537
automation, graphic representation of sinker knitting, universal code 5506
blended knitted fabrics. markets. creative possibilities for blends 3461
circular knitting of imitation plush and sinker lined fabrics, properties 239
circular. double sinking technique for pile and suede knits 5051
circular. filament and spun yarn combinations in designing 4237
CMS machines from Stoll. new loop structures and knitted constructions 5077
CMS Selectanit range from Stoll. three basic models 5076
computer aided weft knitting. completion of fabrics without samples 5912
computer control. effects on quality in Polish knitting industry 8295
conference papers on manmade fibers and various knitting topics 5913
cotton quality requirements. India 3203
Deimo computerized pattern selection 7876
design systems for sinker knitting. universal matrix, encoding variables 234
designing jacquard patterns for multi-color sinker hosiery knitting 4238
desingeing with cable stitches 7434
Diamant model 5480/19-21 circulating carriage jacquard machine from VEB Elite Diamant 5939
dimensional stability 3462
double sinker, CAD program 5052
electronic technology at ITMA [1987] 4723
elements, wear. contribution of various fibers 4264
Faeroe Islands. traditional knitting techniques 2600
fly, fiber. formation and removal 5053
forces on yarn obtained by transducer mounted on needle from Oy Tech Center in Finland 7066
form. Steiger's Electra model flat knitting machines 5080
formula for jacquard hosiery generates data for elasticity and yarn consumption 5054
handknit raglan sweaters 2595
handknit sweaters for women whose bust exceeds forty inches 5055
hosiery. double cylinder knitting machine Savio Matec 2002 model 5065
hosiery. four wale plain jersey construction limits laddering 240
ikat. adapting and applying weaving techniques to hand knit products 1025
India. acrylic fiber-based projects for rural economy 3400
ITMA [1987]. technical advances 1016
Jac-CAD 2000 from Grosse. design studio system for jacquard knitting and weaving 7141
jacquard technique. positive needle control 7440
jacquard. overview of design techniques. need for simpler methods 8288
Jumberca SYX-3 single jersey knitting machine and divided knitting action 2603
knit 1/slip 1 stitch sequence results in weatherproof fabric 7435
Knitmaster's DesignMaster Electronic. design and knit repeating and nonrepeating stitch patterns 4244
knitting force tester. monitors yarn tension 5056
M-repeat patterning system for circular knitters 4235
machines. survey of manufacturers and importers 4239
MC-643 four system flat knitting machine from Universal Maschinenfabrik 5079
Model DJE-2 large diameter double jersey knitting machine from Jumberca. electronic individual needle selection 8303
Model SYX-3 single jersey machines from Jumberca. counter-movement knitting technology 3475
Moratronik MK7 large diameter rib knitting machine from Sulzer Morat 5929
needle damage, investigation of causes, simulation test method 548
needle wear, latch. electron microscope evaluation 8296
Optima series pile shearing machine from Vollenweider. used by Grober in high pile knitting operation 4261
pantyhose. dimensional instability. calculating yarn lengths knitted into hose 5057
pattern preparation. System 500. Jumberca 8282
plush fabric on Diamant FR1 flat knitters. fabrics and methods 4240
polyacrylonitrile self-twist, strength, relation to nip length 7064
polyvinyl chloride/wool staple, knitting, production 4981
reduction of setup time by improving machine technology 5058
rib. planning, casting on and off 1026
Sarig Fashions Knitting Mill produces sweater blanks, profiled 1479
short rows and wrapping 4241
Soviet flat knitting method for openwork fabrics 4236
stitch-knitting in loop-pile fabric manufacture 8297
stripes in taffeta raschel knit fabrics. machine stops and starts 1782

sweaters, seamless neck-down design 4228
sweaters. custom fit handknit, instructions 4230
sweaters. measurement guidelines for handknit sweaters based on conventional sizing 4229
technology, circular and flat. Mayer's ITMA [1987] exhibits 5059
TLJ-5E double jersey circular knitting machine from Jumberca 5071
Tritex circular knitting machines 4254
Universal CAD/CAM design station for flat knitting pattern development 7433
V-bed flat. personal computer aided design and preparation 1781
warp yarn behavior. German research 7401
wool roving/blended with Kapron and other synthetic yarns using flat knitter 5060
work gloves. Hungarian industry combines experience and new technology 8298
yarn defects and unevenness. relation to performance and product quality 7436

KNITTING--WARP
advantages 8299
Design-Scope pattern preparation station by EAT for dobby and jacquard weaving, jacquard warp knitting 4984
diagonal yarns from warp beams on RS 2 DS multiaxial raschel machine 1027
elastic raschel machine RSE 4 N-1, four guide bars. specifications 1028
flax/polyester (Lavsan). blend yarn and knit fabrics 4369
ITMA [1987]. warp knitting, tricot, raschel, crochet machines 5084
Karl Mayer offers training course 5061
loop piling. Karl Mayer's KS 4 FBZ. knitting machines 5948
magazine weft raschel machine RS 3 MSU-V from Mayer 1029
medical textiles overview 8397
mills. growth and expansion to meet growing demands 3463
multiaxial technique and structures. applications and manufacture 6651
raschel home furnishing fabric. computerization of card puncher 8300
tapes on Koketl warp knitters from nylon 6 (Kapron) filament, properties 241
tension changes during warp yarn motion. geometrical model 8301
velour manufacture. auto, apparel market niches 7432

KNITTING AND HOSIERY MILLS (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL MANUFACTURING PLANTS, TEXTILE MILLS)
AQ Industries. fifty year anniversary. profile 2601
Cannon County Knitting major expansion. all electronic knitting machines 4699
computers and software for information, machine maintenance, and dyeing in hosiery mills 4515
directory of yarns used by United Kingdom knitting sector 6618
knitting fiber wastes in outerwear batting 8344
NDL knitting company. origins, plant equipment, and future plans 4700
polyurethane/cotton/nylon 6 underwear fabrics, warp knitting 242
private label merchandising and the knitting industry. markets and effects on operation of knit manufacturers 4619

KNITTING INDUSTRY (SEE ALSO UNDER OTHER HEADINGS, SUCH AS HOSIERY INDUSTRY, TEXTILE TRADE)
accessories and auxiliary equipment for knitting industry at [1987] ITMA 3942
automation in Soviet knitting industry. areas and goals 5063
Brazilian knitting and knit fabric industry 5044
British knitting companies, investment in quality control yields cost savings 5062
British knitwear market, trends in men's wear sales 5914
British. problems. solutions for future success 3405
CAD for flat knitting machines. VDU Selectanit. new design capabilities 7145
CAD systems on display at [1987] ITMA 3131
Carlisle from Russell Corporation elected chairman of National Knitwear Manufacturers Association, other officers 7209
Chinese cashmere knitwear industry, problems confronting industry 243
computer integrated manufacturing 5508
cost efficiency. savings on raw materials for greater profits 7112
dictionaries. Italian, French, English, and German. entries for S-Z 8971
domestic industry and influx of electronic computer technology. machinery on display at [1987] ITMA 4242
high speed, flexibility, quality production. executives describe machinery 5897
hosiery. Italian. [1987] budget exports, rise in imports 7940
Hungarian. imparting dimensional stability to cotton knits 8408
Hungary's Habselyem mill. optimizing resources and machinery 8746
IIC's Starfish prediction system for quality cotton knitgoods production 5899
Ireland. optimistic outlook. future prospects for various industry sectors 7858
ITMA [1987], developments. expansion of electronics 5915
ITMA [1987]. machinery and techniques for knitted piece goods, hosiery and outerwear 7426
ITMA [1987]. machinery and techniques shown for accessories, ready to wear and finishing 7437
ITMA [1987]. preview. technical information 7898
Japanese knitting companies seek protectionism against increasing imports, upgrade machinery to remain competitive 6692
jersey knitting in United Kingdom 5047
Knitting International profiles various countries with emphasis on knitting 7260
NDL knitting company. origins, plant equipment, and future plans 4700
novelty yarns, quality and methods of production 3396
Poland. knitting, hosiery industries [since 1980]. achievements, production 244
Polish. restructuring of companies and national economic problems 8970
private label merchandising and the knitting industry. markets and effects on operation of knit manufacturers 4619
quality control and management requirements 7119
quality initiative program based on British Standard 5750 4707
Quick Response, effect on management costs 3886
Rositta of Holland. modernization of its spinning mills. yarn preparation, rotor spinning 3362
socks. reduction of manual operations for gain in productivity 6684
Starfish measurement system for knit fabrics. origins 5916
United States knitwear producers fight imports with SourceAmerica trade show 6693
United States, twenty year overview. imports, production 1030
warp knits. growth and expansion to meet growing demands 3463
yarn and thread used in knitwear and hosiery [1987]. results synthesized by the Textile Matrix 7862
Yarn Fair/SOURCEAmerica [1988] market trends. popularity of blends 8229
yarns, advantages of using a variety in knitted products. shown at Worsted Spinning Mill in Bucharest 1727

KNITTING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS HOSIERY MACHINERY, INSPECTION, LACE MACHINERY, MONITORING SYSTEMS)
Arachne N1 knitting machines 5917
ATME-I [1988] in Greenville 5536
automation. ITF-Maille. advantages and disadvantages in making-up plant 7132
Bentley's RTC/E, SPJ/ME, Komet knitters, computer control systems 245
British knitters enthusiastic over new machinery at ITMA, especially Stoll models 6694
computer applications to link industry segments 3127
computer control. effects on quality in Polish knitting industry 8295
computers. setting of machinery. prediction of characteristics 5912

crocheting. Comez series for special effect yarns, narrow fabrics, and apparel fabrics 7439
defect recognition software for knitting machines from the Institut fuer Textil- und Verfahrenstechnik 3124
design trends 2602
Detexomat machines for women's hosiery. modular system units 5903
directory manufacturers, machine specifications, and terms 4239
double cylinder. Savio Matec 2002 model 5065
Dubied. knitting machinery developments, pattern programming system. ITMA [1987] preview 246
elastic components to equalize inertia, calculation 7156
electronic applications in hosiery machinery seen at ITMA Paris reviewed 1024
electronics by Stevcoknit and Cleveland Mills and automation at South Carolina knitwear manufacturers 5921
fine knits production on various machines 5922
four-needle oversew and linking machine. Mathbirk 8305
German and English knitting, knitting machine technical vocabulary 7970
glove knitting machines, Japanese. ITMA [1987] exhibits 5066
home knitting. DesignMaster Electronic by Knitmaster 8306
Hungarian work glove manufacture. experience and new systems 8298
innovations in knitting technology at [1987] ITMA 3471
ITMA knitting exhibits, electronics applications from various companies 1783
ITMA [1987] knitting machinery exhibit highlights 1031
ITMA [1987], knitting machinery developments 2598
ITMA [1987]. accessories and sock knitting machines featured 3469
ITMA [1987]. computer controls, electronics. circular sweater strip, flat beds, yardgoods, warp knits, auxiliary equipment 1774
ITMA [1987]. crocheting and knitting machinery product descriptions 5901
ITMA [1987]. detailed survey 5593
ITMA [1987]. developments in electronic control. new hosiery, tricot, raschel machines 6680
ITMA [1987]. for legwear, small diameter circular, for knitting patterns 3466
ITMA [1987]. highlights of specialized knitting machinery 3470
ITMA [1987]. highlights. spinning. weaving. knitting 2306
ITMA [1987]. hosiery and sock knitting machinery. small diameter machines 3464
ITMA [1987]. knitting auxiliary equipment 1776
ITMA [1987]. specialized knitting systems featured 3455
ITMA [1987]. trends in knitting machinery. flat, warp, full fashioned 3465
ITMA [1987]. weaving and knitting technology trends 1730
jacquard machines from Staeubli, high speed. machine features, electronics 5067
jacquard technique. positive needle control 7440
Japanese knitting companies seek protectionism against increasing imports, upgrade machinery to remain competitive 6692
Jordan, Lovatt, and Jones manufactures replacement controllers, retrofit devices, and inspection machines 4243
Karl Mayer RS 2 DS-V raschel machine. industrial fabrics 8325
Karl Mayer RS 3 MSU-N magazine weft raschel machine used by Amoco fabrics to make customized carpet backing 8302
Knitmaster's DesignMaster Electronic. design and knit repeating and nonrepeating stitch patterns 4244
knitting force test device for obtaining information on yarn behavior during stitch formation 7441
knitting. ITMA [1987]. developments, expansion of electronics shown 5915
Leipzig Autumn Fair [1987]. highlights 1032
machinery, techniques and developments shown at ITMA [1987] exhibition 7425
Magica half hose machine. elaborate new machinery for intarsia 5904
manufacture of narrow fabrics 5144
Memminger innovations at ITMA [1987] show 247
Memminger MPF-G1 positive feeder, MER-4 elastane roller, Decotex Yarn Meter, Fabric Scanner LMW 7438
Model DJE-2 large diameter double jersey knitting machine from Jumberca. electronic individual needle selection 8303
Monk Cotton's Superspeed and Super Rib, electronic control, operational safety 3467
NCI loom for novelty items by Scheller 5918
NDL knitting company. origins, plant equipment, and future plans 4700
needle technology. Groz-Beckert developments 4156
needle wear, latch. electron microscope evaluation 8296
needles. Groz-Beckert. innovations 5923
net curtain raschel machine. patterning possibilities 3472
North Carolina men's hosiery manufacturers upgrade mills with electronic knitting machinery, plant equipment 6686
Orizio. knitting machinery at ITMA [1987]. highlights 248
Oy Tech Center. yarn tension monitored electronically on weft knitting machines 6713
pattern preparation unit, VDU selectanit from Stoll. computer aided 4249
pattern preparation. System 500. Jumberca 8282
Quantex Knitting's high speed, large diameter, single knit machine. two models, growth markets 5919
rectilinear machines by Protti. description and history 5924
Relanit. single jersey technology. technical and productive features. applications 3468
ring spinning frame from Textima. drawing and knitting models 7189
Rumi Filli knitting machinery, hosiery machinery. ITMA [1987] preview 249
Saxonia-Franke develops new technology to manufacture needle-beds 8304
Sick's NK 31 stop motion device, prevents needle breakage defects 250
single needle Model 100 KA S from Kettma. using single or double chain stitch 3473
sinkers by Kern Liebers. range of product. examination of design technology 6696
six-link drive gears with aligned coupling, kinematics, program, design 5043
socks. Meridiana by Santoni. latest disc-cylinder model. capabilities 6685
Sointes automatic rib knitting and bar loading machine for knitwear manufacturers 4245
specialized. machinery for headgear, neckties, knitting of textured and metallic yarns 6679
Steiger. ITMA [1987] preview, TGS pattern programming system 251
stocking machinery. ITMA [1987]. exhibits presented by Italian firms 8290
sweater-strip and circular yardgoods machines presented at [1987] ITMA 1017
technological advances presented at [1987] ITMA 1016
technology. trends and developments seen at ITMA Paris reviewed 1033
tricot and raschel machines. developments by Liba and Karl Mayer 6678
tricot and raschel. developments in electronics for increased flexibility and productivity 7424
Trip-Lite's Sock-Feed System with ITF Yarn Feeder and Thetis programmable transmission system 4246
Tritex International and their products 6695
Ultra-Assembler machine for one piece pantyhose. innovations 5905
Uniplet small diameter knitting machines from Elitex 5064
Universal's Model MC-613 double system electronic jacquard/transfer machine 4247
utilization by different work shifts. computer analysis 1510
Variatex TEJ by Mecmor, 180 series 5920
warp insertion and compound needle 6697
weakened sales force knitting machinery manufacturers to expand sales areas 5821
Wildman Jacquard's NR knitters, artificial fur knitting 4248

KNITTING MACHINERY--CIRCULAR
accessories from Mayer & Cie 5073
Brematex Zero line 5925
cam design. calculus method for marking cam profiles 1784
circular knitters, safety evaluation of their designs 4255
circular Spanish construction. developments allowing greater yield and flexibility 2605
circular yardgoods. developments presented at [1987] ITMA 1136
cleaning methods. protective systems against dust and fluff accumulation 256
computer testing of needle-key zone load 7159
current status. rethinking product development 6701
Custom Industries introduces new line of yardgoods knitting machines with single needle and cylinder and dial 1018
Czech. manufacturers exhibiting at [1987] ITMA 7442
Czechoslovakian knitting machinery. ITMA [1987] preview 252
design trends 2602
development trends observed at [1987] ITMA 7449
DWN-3E electronic links machine. TLJ-5E electronic cylinder and dial garment length machine. new from Jumberca 5926
electronic patterning and guidance controls. automatic sock knitting at [1987] ITMA 2606
ELHA machines from Lucas. electronic controls 3474
ELIN laser control and measurement system 4250
fabric take-off. forces exerted on needle bar 7450
garment length machines, electronically controlled, at ITMA Paris 1034
Harry Lucas Maschinenfabrik. small diameter specialist circular knitting machines 4251
high speed, flexibility, quality production. executives describe machinery 5897
interlock. Jumberca model details 7451
ITMA [1987] knitting machinery, small diameter circular, for legwear, knitting patterns 3466
ITMA [1987]. circular weft knitting machines 5069
ITMA [1987]. display of knitting and hosiery machines 5940
ITMA [1987]. knitting machine product reports 5927
ITMA [1987]. large diameter circular knitting machines 1775
ITMA [1987]. profiles 5068
ITMA [1987]. small diameter circular knitting machines 1777
ITMA [1987]. technical advances 1019
Jumberca DWN-3E circular links-links machine. construction and design possibilities 8308
Jumberca Links-Links technology from MVJL machine to the new DWN-3E machine 8285
Jumberca machinery. ITMA [1987] preview 253
Jumberca SYX-3 single knit machine. new system for stitch formation 7444
Jumberca's Model DJE-2 double jersey machine 4252
Jumberca's Models DWN-3E and TLJ-5E. knit apparel 5070
Jumberca. eight variations on circular knitting machines at [1987] ITMA 7443
Jumberca. SYX-3 single jersey machine with divided knitting action 2603
K. F. company. technical and electronic innovations 254
lubrication system and tests, no oil spots, operational systems 5074
lubrication. pressure oiler. Pulsonic 2 from Memminger 5933
machinery and accessory exhibitions at [1987] ITMA 7452
Marchisio single knit machine for convertibility in jersey 6698
Mayer & Cie MCPE machine for chenille. patented preforming technique 8332
Mayer and Cie circular knitting machinery at [1987] ITMA. Relanit system, jacquard plush, jacquard/transfer, underwear models 2604
Mayer, innovations. ITMA [1987] exhibits 5059
Mecmor Variatex 180TEJ and 2500, computer pattern preparation 8309
Mecmor Variatex TEJ. new 180 TEJ version. width variation 5928
Memminger's quality control systems for circular knitters 4260
Model SJE-2L from Jumberca for single jersey fabrics 6699
model SYX-3 large diameter single jersey machine from Jumberca 6702
Model SYX-3 single jersey machines from Jumberca. counter-movement knitting technology 3475
models displayed by various manufacturers at ITMA Paris surveyed 1035
Monarch's FX range for a variety of knits represented by Piertex Italia 8310
Monarch, Pai Lung and Tritex systems at [1987] ITMA 7445
Moratronik MK7 large diameter rib knitting machine from Sulzer Morat 5929
multiphase Spanish machine by Vilargunte. design for the future 7461
MW knit fabric inspection unit manufactured by Erwin Sick for circular knitting machines 8287
needle deterioration and relation to open end cotton yarn properties 4222
needle for needle electronic selection in Monarch machines with both single and double needle beds. CAD/CAM compatability 7453
needle latch design, calculation of latch rigidity 7160
needle-key zone, dynamic load, calculation method 7161
needle-sinker, formulaic design method 5075
new developments in machines for yard goods. large selection from which to choose 6703
NK30 optical light sensor to detect needle defects on circular knitters 4253
Nova D double cylinder, double system links/links circular knitting machine from Strojimport 6687
OGS/Sandoni electronic transformation with needle-needle selection for large diameter machines 8281
OGS/Sandonini application for electronic jacquard on large diameter machine 7446
overviews of small machines, various applications 5934
Ovitronic transformation kit for Variatex Mec-Mor 180 jacquard 8311
Patronik 2000 pattern preparation system from Sulzer Morat 6700
Pulsonic 2 pressure oiler for machine lubrication from Memminger 5930
Pulsonic Mini 2 and Pulsonic 2 units for lubrication of circular knitting machinery 255
radionuclide measurement of knitting machine component wear 3863
Relanit line from Mayer & Cie 5931
removal mechanisms classified based on abilities 4256
roller take-up designs for improved speeds and tension equalization 6704
single bed, roller fabric transport system. defects and measurement system 7162
sinker, latch needle system for circular knitter, design 6705
SJM-3 by Jumberca for wide range of patterns 5932
small and medium diameter machines from OSG. ITMA [1987] preview 257
streaking in knit fabrics causes, solutions 5935
Swiss textile machinery associations post-ITMA meeting. machine, apparel industry impact of new technology 7963
take off, equalization of fabric 5936
Textima profile. Leipzig exhibits 1524
TEXTOL range of lubricants and branded oils. meets demands of modern machinery 265
thread crimp, digital measurement on large diameter machines 1785
TLJ-5E double jersey circular knitting machine from Jumberca 5071
Tritex circular knitting machines 4254
tubular netting, packing. Valentin Rius Clapers 5937
Variatex 2500 for electronic jacquard transfer. innovation and development 7447
Variatex T.E.J. 2500 from Mecmor 5072
Vignoni's compound needle for its BMX machine 7448
wrapping techniques. mechanics, future possibilities 7454

KNITTING MACHINERY--FLAT
APM, EMM, Wagatex systems at [1987] ITMA 7455

CAD for flat knitting machines. VDU Selectanit. new design capabilities 7145
CAD for flat machines. Universal MA-5500 pattern system. control 7135
CMS generation of Selectanit automatic flat knitting machines from Stoll 256
CMS machines from Stoll for three dimensional knitting 3476
CMS machines from Stoll. new loop structures and knitted constructions 5077
CMS Selectanit range from Stoll. three basic models 5076
CMS Selectanit series from Stoll 5938
CMS V-bed flat knitting machines from Stoll. computerized pattern preparation 6706
CMS-series Selectanit computer controlled flat knitting machines from Stoll 3477
design innovations seen at ITMA Paris reviewed. electronic control emphasized 1037
Diamant model 5480/19-21 circulating carriage jacquard machine from VEB Elite Diamant 5939
Dubied's DUCAD II computer-aided design system, SDR 2 and JET 3 knitting machines 8312
Dubied. knitting machinery developments, pattern programming system. ITMA [1987] preview 246
Electra Baby from Steiger for notions. electronic 5078
electronic machine control, computer aided pattern preparation. Hungary 1788
Emmetronic 1 and 2. retrofit machines for electronic pattern preparation 1020
full fashioned knitwear. Shima's SET-092 FF machine 5943
guards for drive and winding mechanisms 744
highlights of specialized knitting machinery at [1987] ITMA 3470
improved flat knitting machinery exhibited at [1987] ITMA 2607
Italian manufacturers exhibiting at [1987] ITMA 7456
ITMA [1987]. auxiliary equipment and accessories 5941
ITMA [1987]. display of knitting and hosiery machines 5940
ITMA [1987]. flat knitting machine highlights 1786
ITMA [1987]. knitting machine product reports 5927
ITMA [1987]. machines for flat knitgoods. technological development. quality 6707
ITMA [1987]. overview of innovations and improvements to existing machines 6681
ITMA [1987]. profiles 5068
knit pattern possibilities on jacquard transfer machines 7431
machinery and accessory exhibitions at [1987] ITMA 7452
Magrini Meccanica Emmetronic transformation kit for flat bed machines. allows needle for needle electronic selection 8313
Mayer, innovations. ITMA [1987] exhibits 5059
MC-643 four system flat knitting machine from Universal Maschinenfabrik 5079
Model MC-613 flat knitting machine from Universal 3478
Omega. new exhibitor at ITMA. electronic control and video-jacquard 8314
overview of [1987] ITMA 1789
plush fabric on Diamant FR1 flat knitters. fabrics and methods 4240
production of full fashioned articles. improvements in quality stimulate need to overcome problems 8321
Protti lines seen at the 1987 [ITMA] show 259
Protti P94 rectilinear machine with four drops. showing at the ITMA [1987] exhibition 7457
Protti systems at the [1987] ITMA 8315
Protti, ITMA [1987] preview of exhibits 260
Rimach model J290F electronically controlled jacquard flat knitting machine with shaping potential 1787
Shima Seiki's SET 092 FF. full-regular knitting 8316
Sirio 4000 four-system automatic flat knitting machine from EMM 261
Sirio 4000 from EMM 5942 6708
Soviet flat knitting method for openwork fabrics 4236
Steiger's Electra line 6709 8317
Steiger's. Electra models. Ribomat/Autolinker 5080
Stoll CMS Selectanit 300, 400, 402 models. patterning with Sensofil tension compensating unit 6710
Stoll CMS Selectanit machines with variable carriage stroke and stitch length variations 7458
Stoll CMS Selectanit machines. new generation presented at ITMA [1987] exhibit 8318
Stoll CMS series flat knitting machines. surface patterns from new carriage developments 3479
Stoll's machinery at ITMA [1987] 8319
Tatsumi's T-4CR jacquard knitting machine with computerized controller 8320
thread positioning device from Universal 6711
Universal Maschinenfabrik. company and product profile 3480
V-bed flat machine using bi-partite compound needles. patent by Shima Seiki 1036
V-bed flat machine. FCM-20 twin-lock from Heiko Seisakusho 4257

KNITTING MACHINERY--FULL FASHIONED

APM 8 TE/3 machine. triple feed rectilinear 5944
CMS machines from Stoll. new loop structures and knitted constructions 5077
design trends 2602
device for simultaneous measurement and turning inside out of full fashioned knits 8794
Examat linker for increasing productivity 8280
ITMA [1987]. full fashioned machines 5081
Models NCI and BCI/BCF from Scheller 8323
Models SD/1 and CM/91 from Comet Martinelli for intarsia knitting 8322
Omatex Rimach's J 290 F with electronic control 6674
rectilinear. ability to produce full fashioned articles 5900
Rimach J290F features, programming, sampling capabilities 262
Scheller knitting machines. Models NCI and BCI/BCF 6712
Stoll CMS Selectanit machines for full fashioned and intarsia knits 7458

KNITTING MACHINERY--STRAIGHT BAR

full fashioned straight bar machine models by Scheller exhibited at ITMA Paris 1038
Scheller numerically controlled intarsia/Argyle and intarsia machines. full fashioned knitwear production 2608

KNITTING MACHINERY--WARP

bi-axial and multi-axial fabrics on raschel machines manufactured by Karl Mayer 4233
design trends 2602
Dundee Mills profile. new warp knitting operations for terry towels 1791
DV 6 DUM warp knitter. products, uses 5082
entwining unit. entwines staple fiber yarns with filament yarns using compressed air unit 161
highlights of specialized knitting machinery at [1987] ITMA 3470
intermingling, air, of continuous filament yarn by Heberlein and LIBA 5947
ITMA [1987]. cotton knitting, stitch bonding, and crocheting machinery 2612
ITMA [1987]. development trends observed 7449
ITMA [1987]. highlights of Mayer warp knitting machines 2609
ITMA [1987]. highlights. spinning. weaving. knitting 2306
ITMA [1987]. Liba and Karl Mayer systems 7459
ITMA [1987]. Liba exhibits 2610
ITMA [1987]. machinery and accessory exhibitions 7452
ITMA [1987]. new automatic warp knitting machines with control units for patterning, machine functions 5945
ITMA [1987]. profiles 5085
ITMA [1987]. super speed machines 2683
ITMA [1987]. technology, circular and flat. Mayer 5059
ITMA [1987]. Textima exhibits 2611
ITMA [1987]. tricot, two bar, computerization, jacquard 1039
ITMA [1987]. warp knitting highlights 1790
ITMA [1987]. warp knitting, tricot, raschel, crochet machines 5084
jacquard raschel machine RJSG 4 F-NE from Mayer with electromagnetic yarn control 1002

Karl Mayer RJSG 4F-NE jacquard raschel machine. electronic jacquard selection process 5086
knit velours. uses for furniture covering 6690
Liba Maschinenfabrik's Copcentra, Racop and Weftloc warp knitting and double bar raschel machines for pile fabrics 4258
loop formation on HDR-14EEW raschel knitter, design abilities 263
loop piling, warp. Karl Mayer's KS 4 FBZ 5948
Model 14 122 Liropol pile warp knitting machine from VEB 8324
multiaxial RS 2 DS raschel machine from Karl Mayer 5898
multiaxial warp knitting machines. industrial fabrics 5966
net curtains. raschel technology 5447
new developments. growth and expansion 3463
productivity and flexibility 8299
Prokostop 4408 control unit for controlling Prokostop yarn sheet monitor on warp knitting machines 5946
raschel knit curtains. product evolution from new techniques and finer synthetic yarns 4259
raschel. Karl Mayer RSE 11 EH for embroidery-like patterns 7460
RS 3 MSU-V Raschel machine. industrial textiles 5087
specialized knitting systems featured at [1987] ITMA 3455
terry fabric production 264
tricot HKS 3 machine from Karl Mayer 5083
tricot machine from Mayer, KS 5 SU-EBC/EAC. specifications 1021

KNOTS AND KNOTTING
fabric and knit goods. textile defects as possible signifiers 1732
Schlafhorst's pneumatic knotless tying for warp yarns, effect on loom reed 211
spliced yarn. performance in warping and weaving 983
splicing, knotless, Jointair 905 splicer on Savio RAS-15 spinners 136
tension caused by cotton yarn knots, factors, best knots for weaving 4209
yarn joints in all-wool yarns. effect on tension of running yarn 207
yarn tension examined in terms of guide diameter and yarn linear density 943

KODEL IS A POLYESTER FIBER.

KORATRON, SEE DURABLE PRESS.

KYNOL IS A NOVOLOID FIBER.

LABELING
apparel, international textile care labeling symbols 3735
apparel. adhesives causing spots not visible until after drycleaning 4594
apparel. bar coding. Quick Response. review 4517
bar code scanners at Kids 'R Us. effect on children's wear industry 5426
bar coded system for Soabar, Print-Apply system specifications 1527
bar codes at Richards Sportswear 7726
bar codes, review of technology. applications for industrial launderers 5479
bar coding at Haggar for raw materials, tracking, finished goods tickets 5357
bar coding at Mervyn's department stores 4708
bar coding in apparel industry pushed forward by Quick Response and vendor marking 5358
bar coding inventory system from Haggar 6233
bar coding. standards in apparel, retail, textile, discussed 3078
barcoding technology in textile rental industry 5423
British withdraw proposal to label all furs caught in leghold traps 5566
carcinogen warning labels in California fuels formaldehyde controversy 6234
care labeling, inaccurate labels force apparel industry to adhere to Federal Trade Commission regulations 7023
care labels. British Standards BS2747:1986. imminent changes 578
Carpet and Rug Institute's industry-wide shipping label, uniform access system to computer network 7037
Carpet and Rug Institute's industry-wide shipping label 7037
commercial application label program, Carpet Cushion Council. choosing types for commercial installation 5432
computer design systems, online with manufacturers, retailers for Quick Response 2972
current status. regulations and systems 2844
directory United Kingdom manufacturers 2034
electronic, Mervyn's entry. point-of-sale scanners, bar coding, electronic document interchange 2986
Federal Trade Commission, new rules for wool, fur, and textile labels 7229
garment labeling in United Kingdom. impact of computers and new technologies 2035
Germany's new sizing system from the HAKA institute 2031
Joel and Arnoff's Badger 3 heat seal machine to construct and apply labels 4564
laundering apparel at lower temperature ranges 3730
Levi's used barcoded labels to shorten retailers' processing time 6175
machinery in hosiery and men's underwear industry 1666
packaging and identification product manufacturers and merchandise at [1987] Bobbin Show 549
Paxar, bar coding and woven labels. company profile 2820
Phillips-Van Heusen bar coded tag and label production system 2843
Point of Sale systems for use in apparel field. bar codes and optical character recognition price tags 2032
preticketing, by vendor, in apparel industry. advantages for apparel manufacturers and options in systems 714
real time systems versus microcomputer generated work rickets 7152
serviceability standardization. labeling and care instructions with regard to consumer expectations 1309
Superba manufactures PEL 20 automatic ball winder and packaging 3379
Superba's Type STR 402 yarn ball inspection mechanism and EMB packaging equipment 6367
symbols and manufacturing specifications for textile cleaning. problems 2064
textile product damage and hidden defects, improper care labeling 3799
ticketing manufacturers taking EDI to Far East and Western Europe. Quick Response 4724
United Kingdom practices. fiber content, flammability, care, origin. international symbols and standards 2033
Universal Product Code, varying approaches to implementation of technology. J.C. Penney's and others 2979
Williamson-Dickie, UPC ticketing. three year phase-in program, benefits 6176

LABOR, SEE EMPLOYEE TRAINING, INDUSTRIAL HEALTH AND SAFETY, NOISE, PERSONNEL MANAGEMENT, TIME STUDY.

LACE
Courtaulds acquires Liberty Fabrics 7107
historic pieces from the Hertha Koenig collection. review 4646
Omatex Rimach's J 290 F. complete electronic control 6674
Ora Humberd's collection 7690
ready-to-wear designer fashions [spring 1988], eveningwear 1332
Russian. lace [for 1987] produced by the Leningrad Lace Concern 338

LACE MACHINERY
ITMA [1987]. bobbin lace machines 8257

LAMINATED FABRIC MANUFACTURE
Awnlit. illuminated awning developed by Duracote 8667
conveyor tapes, designs for textile interlayers 1869
developments at Textile Technology Forum 1796
F. Calemard's ultrasonic equipment for fusing, cutting, and laminating 5392
factors influencing technique, hot versus cold adhesives. dry

versus liquid films 271
Freudenberg's Lutradur spunbonded polyester laminated by Xiro process 1412
impregnating system, vertical. aerospace plastics. Caratsch 5968
Johnson and Johnson develops laminate wound dressing. high absorbency and low adherence 5983
powder lamination, advantages over flame lamination. process details 1137
ultrasonic bonding and laminating. technology, applications, equipment suppliers 1793

LAMINATED FABRICS (SEE ALSO OTHER HEADINGS, SUCH AS CARPET BACKINGS AND BACKCOATINGS, FUSING, LAMINATES)
adhesive fabric for nursery decoration from Springs 8662
cutting. Aqua Jet water jet that cuts through Kevlar 6187
Darlexx from Darlington Fabrics, elastic fabric with polyurethane thermoplastic film laminate. types, manufacture 6019
developments. films, reinforcing fabrics, processing machinery 1059
film reinforced laminated nonwovens. hospital applications 1110
high performance fabric for winter sports. WB 400 from Schoeller Textil 8378
hospital linen waterproofed with vinyl coating. gradual delamination through wear and cleaning 2065
INDEX [1987] Congress Papers. laminated nonwovens. water jet cutting 1138
Lamous. leather substitute. technology and application 2685
Lumitex light-emitting material of woven optical fibers and acrylic plastic 4377
manufacturing methods. trends in materials and manufacturing 270
metalized fabrics. techniques and applications 8410
nonwoven and laminated structure bonding with thermoplastic, low melting, semi-crystalline polyester powders 1792
nonwoven membrane laminates. fabric thermal insulation and water vapor permeability 1139
nonwovens and water vapor permeable membranes. requirements, problems 1140
Pellon nonwoven fabrics laminated with Sympatex membrane to obtain new weatherproof fabrics 5097
Sympatex from Enka. polyester membrane for outerwear, hats, footwear 2694
weatherproof activewear. Zefsport nylon fabric reinforced with Gore-Tex laminate 2648
wool bonded to polyurethane by heat pressing 1817

LAMINATES (SEE ALSO OTHER HEADINGS, SUCH AS COMPOSITES, FOAMS, LAMINATED FABRIC MANUFACTURE, LAMINATED FABRICS, MOLDING)
APC-2 cross-ply laminates. residual stresses 6044
aramid reinforced aluminum laminate panels. residual strength 1142
AS4/3501-6 carbon/epoxy laminates. failure 7845
boron-aluminum composite laminates. plasticity effect on free edge stresses 1824
carbon fiber reinforced PEEK. experimental autoclave for polymeric diaphragm forming of thermoplastics 4269
carbon fiber reinforced plastic laminates. chemical resistance. comparisons with glass and nonwoven polyester veils 5109
carbon fiber reinforced plastics. increased damping by short fibers or matrix with high dissipation 5969
carbon fiber reinforced polyether ether ketone laminates. temperature distribution and thermal cycling 7470
carbon fiber reinforced polyimides. notch sensitivity, fatigue loading 268
carbon fiber/PEEK laminates. development of impact damage 3512
carbon fiber/resin matrix interphase. effect of carbon fiber surface treatment on composite performance 4313
cement laminates, nonwoven fabric reinforced 6038
clamping and cross-sectional rotation 6319
composite shell structures. free and forced nonlinear dynamics 1825
composite. buffer strips assessed for stress reduction concentration 1448
continuous laminates based on polyphenylene sulfide 980
continuous polyether ether ketone/carbon fiber reinforced thermoplastic composites. flow processes 4317
contour plotting displays mode shapes of free vibration and buckling 8354
curvilinear fiber format compared to straightline. increase in structural efficiency 1143
delaminated sublaminate. buckling model 2684
double-layered carbon-phenolic/carbon-epoxy filament wound structure 7471
Eddy Current measures fiber damage in delaminated graphite epoxy 1447
end notched flexure used to study interlaminar fracture of graphite composites 6303
epoxy resins for stress-free high performance composites 4320
fiber composites. tensor transformations and failure criteria 8355
fiber reinforced composite plates. prediction of impact induced delaminations 4671
fiber/resin ratio of advanced composites. nondestructive determination by ultrasonic technique 4672
filament wound cylinders. manufacturing stresses and strains 4321
finite element analysis of advanced composites. integrated approach 4673
finite element stress analysis for isotropic and orthotropic plates with circular notches 6320
fretting fatigue of carbon fiber reinforced plastic laminates 871
glass fiber reinforced plastics. mechanical and acoustic emission response 1870
glass fiber reinforced polyester laminates. fatigue damage 8735
glass polyester laminates. stress-rupture times. effect of temperature 2639
graphite epoxy laminates. interlaminar fracture toughness. effect of selective adhesive interleaving 2641
graphite fabric T-300 impregnated with Skybond 703 resin. chemical behavior during cure 1144
graphite fiber/polyether ether ketone. effects of lamination process cooling rate 4325
graphite/epoxy composites. interleaving improvement of toughness 4326
graphite/epoxy laminate. dynamic delamination fracture toughness 3516
high performance composites deformation and failure processes. matrix dominated behavior 7501
hybrid graphite/epoxy laminates. thermal cycling effects on dimensional stability 4370
interlaminar fracture toughness testing of composites. analytical compliance method 688
Kevlar 49/epoxy beams and rings. bending behavior 1141
Kevlar 49/epoxy laminates. bending response of beams and rings 8358
laminated composites containing an elliptical opening. approximate stress analyses and fracture models 1871
laminated composites containing an elliptical opening. model modification 1830
laminated composites containing open hole. compression response 4330
matrix cracks as a function of time 7847
mechanical properties. effects of curve 6010
micromechanical analysis of prestressed composite laminates 7823
multi-angle carbon fiber/polyetherether ketone laminates. fatigue testing 8736
multi-layer laminate for bicycle frames. Technique du Verre Tisse 1872
multidimensional fiber reinforced composites. damage tolerance 4331
notched strength predictions. finite width 7502
PE/epoxy composites. fracture toughness 4306
PEKK as thermoplastic matrix for high performance composites 4307
polyether ketone ketone polymer. high performance thermoplastic

matrix system for composites 6546
polyethylene and carbon fiber hybrid laminates. properties 1145
radiation curable laminating adhesives, growing interest 5952
SAMPE. Materials--Pathway to Future 4301
shape-molding fabric with two component structure 8383
simultaneous failure of all layers in laminated composites 6321
Spectra fiber composites. ballistic performance 4308
stiffness loss in composite laminates due to curved matrix cracks 6311
strength of multidirectional unnotched and notched composite laminates 6312
stress wave factor and transply crack density. correlation 7507
symmetrically laminated 36 DOF composite triangular plate. shear deformation 6313
Sympatex breathable, waterproof polyester membrane from Akzo 8425
thermal expansion coefficients of cross-ply laminates containing many cracks 6322
thermally cycled high temperature laminates. microcracking behavior 4339
thick section. process model applied to cure 1802
three dimensional thermal stresses in angle-ply composite laminates 6015
Torayca carbon stitching thread for z-directional laminates 4101
transverse crack initiation and multiplication in symmetric cross-ply laminates 6323
transverse thermal expansion coefficients 8373
unsaturated polyester resins and laminates. reduction of optical density of smoke during burning 3961
world consumption figures for production circuits used in electronics industry 3881
Young's modulus in piecewise-isotropic laminate with wavy patterns. micromechanics model 7846

LANTHIONINE, SEE WOOL, WOOL FIBERS.

LAPS AND LAPPING
anti-roller lap cleaner, features, method of application 6574
bunker feeder field sensors, calculations to control fiber layer uniformity 108
cotton fibers. moisture content in laps and sliver, computerized method 123
fiber mass control device for T-16 picker, design, control 4090
LapCenter 820 from Zinser. integrated production stages 8152
method for fiber orientation with a lap for straight fibers. adapted to wool and cotton 128
Model RD 300 ribbon lapping machine from Vauk Macchine Tessili 3333
picker lap weight variation, method of calculation to determine lap irregularity 1265
Unilap combing preparation process. single and overall doubling 932
Unilap from Rieter at [1987] ITMA 4124

LASERS (SEE ALSO OTHER HEADINGS, SUCH AS CUTTING MACHINERY)
bar coding at Haggar for raw materials, tracking, finished goods tickets 5357
bar coding pushed forward by vendor marking and need for inventory and production control 5358
Brinkmann's model 2010 laser scanner. particle analysis 3861
cutting machinery. developments in automation 6982
cutting woven cotton fabrics. mathematical model 533
ELIN laser control and measurement system for circular knitting machines 4250
filters. polymeric materials modified to improve cotton fly dust separation 8906
graphite reinforced composites. laser curing 1048
increasing component work life with lasers, coatings, facing 4749
inspection of spot bonded fabrics. laser goniophotometer 3832
ITMA [1987]. new laser inspection equipment for dyeing pretreatment processes 6831
laser cutting, nomogram of parameters for flax, cotton fabrics 6981
laser radiation action on fibers. basic stages and threshold characteristics 7361
laser systems for rotary-screen engraving seen at G-Mex exhibition 4744
optical system for fabric cutting. evaluation method 4546
Optocator laser triangulation probe for measuring thickness of carpets 3061
organic colorants for optical disk memory 3991
printing, rotation, of screens. laser production from Stork Screens 467
rotor spinners, laser double anemometry 4695
Sick Optik's two phase, automatic laser scanning inspection system for nonwovens 2292
Stork STK-2000 laser engraving system for rotary screen printing 2773

LATEX, SEE ELASTOMERS.

LAUNDERING (SEE ALSO OTHER HEADINGS, SUCH AS DETERGENTS, HEALTHCARE AND MEDICAL TEXTILES, IRONING, PRESSING, SHRINKAGE, SOILING, STAINS, WASHING)
abrasion resistance of uniform fabrics 7516
advertising kit for industrial launderers, study. materials, test project, effectiveness 7711
American Laundry Digest Buyers' Guide. manufacturers, products 5401
antiperspirant damage to garments made of cellulose fibers. cause, prevention 2068
apparel at lower temperature ranges 3730
apparel for hospital workers and patients. designed by Chalmers University in Sweden. inspired by sportswear 3754
Aspergillus niger study on cotton fabric. effectiveness of mildewcide 6214
Austrian laundering, drycleaning trades. history 3734
Austrian laundry, drycleaning industries. history and development 5592
automatic feeders for flatwork finishing systems, their effectiveness 4583
automatic garment feeding into steam tunnel. streamlining polyester/cotton workwear processing 2069
bar codes, review of technology. applications for industrial launderers 5479
batch tunnel washer and washer extractor compared for operating costs 4595
buyers' guide to firms serving South African industry 2865
buyers' guide to South African services 6206
cellulase in fabric washing compositions 7717
cellulose fabrics. deterioration when resins applied to stiff fabrics 7712
closed washing cycle for work apparel. recycling energy and materials 3743
Colonial Williamsburg Foundation laundry. daily volume, special problems, laundering process, facility equipment 2066
colorfastness, effect on. cotton knit fabrics dyed with reactive dyes 395
computer equipment for drycleaning and laundering companies 3911
computerized soil counting system at Shasta Linen Supply. annual cost savings 4584
computers and Data-Becker's Kalkumat program for the drycleaning industry 4563
continuous batch washing developments. flexibility 4585
continuous wash system versus conventional laundering equipment, field study details and results 4586
core yarn fabrics. influence on air permeability 1298
cotton and wool. removal of aged oily stains 2052
cotton dyed red. effectiveness dye setting treatments before and after washing 469
customer complaints, effective handling by launderer and drycleaner 3876

detergents. Lipolase from Novo Industries, low temperature use 7005
discharge printing. fading and discoloration 464
distributors directory. state-by-state listing of companies distributing laundry equipment, supplies, other goods and services 2868
down-filled coats. removing splotches caused by solvents 2055
drycleaning. Buse System. acidification of alkaline wastewater from drycleaners 4762
emblem removal with dimethylformamide. methods and safety 2070
enzyme technology's usefulness in industrial laundering 7713
equipment for large laundry operations, Laundry and Cleaning [1988], ironers, washers, finishing equipment 6216
equipment, assessing options when deciding to opt for new or rebuilt in a textile rental facility 2071
fabric softeners. effect on terrycloth towels 579
fiberfill pilling due to nonwoven fibers in the filling material 7008
field trials in two industrial laundry wastewater pretreatment systems 3145
folders, stackers, feeders, ironers. surveys of machinery available from various manufacturers 2072
Forth Valley Health Board's FLICS bar code linen tracking system for hospital laundries 4566
future. fictional vision of industrial laundering operation in the next century 7714
garment dyeing. filtering and removing stone residue from wastewater 8509
garments with dark spots on shoulders caused by spillage of hair sprays, removal procedures 2058
hospital linen laundering in the Benelux countries. automated and high quality 4587
hospital linen waterproofed with vinyl coating. gradual delamination through wear and cleaning 2065
hospital. cost effective collection, storage, transport 4578
household, commercial. reduced detergent requirements. German research 7671
improving employee performance in a laundry plant. proven factors in Benelux facilities 4588
industrial laundering, move to laundering from drycleaning. reasons 6207
industrial laundries. new techniques in finishing jeans sparks surge in consumer interest 1374
industrial mats. short split extraction cycle. no need to dry 3744
industrial. products on display at [1987] Bobbin Show 526
industry, Austrian [after 1945]. general history 4783
Institute of Industrial Launderers' quality assurance process at Jack Brown Uniform Rental 2862
largest six publicly owned industrial garment/linen companies. financial performance 6217
Laundry and Decontamination Drycleaning System (LADDS). effectiveness 7710
Lavant cleanser for fine linens. developers, marketing plans 2067
linen jacket with interlining. problems encountered. lack of dimensional stability 4524
linen shortages in hospitals, problem solved by in-house computerized distribution and inventory control 1288
Linens Limited hand washes and repairs fine linens 3032
lipase additive for detergents, tradenamed Lipolase, fat dissolving enzyme 2049
Lips Burger Zeist laundering plant, the Netherlands 2863
mat processing by textile rental operators. recent developments 3745
mechanical action related to processing parameters 2856
mechanical actions and how they relate to laundering and drycleaning solvent/water levels 4573
mildewcides compared for cotton fabrics 5402
modern flatwork finishing system, various types 4589
Nedlin plant in Rotterdam. work transportation and management approach 4581
occupational requirements. laundering versus drycleaning 3738
oxygen-based chemical bleaches for textile rental industry 5393
peel strength tester, how it works. proper heat seal between a label and a garment 2867
performance improvement in businesses. critical role of employee involvement 8769
Performance Improvement Project developed by Institute of Industrial Launderers and Virginia Productivity Center 2864
permanent wrinkles from improper cleaning procedures 3731
Personal Best! sales incentive program for industrial launderers 8619
pilot study of FLICS hospital linen tracking system. performance of labels, computer system 4567
polarity of substances in stains. appropriate solvents 3748
pollution standards, West German, create problems for launderers and drycleaners 3950
polypropylene. care instructions 7025
problems of cleaning a garment made from two bolts of fabric 3746
productivity guidelines for a laundry manager wishing to increase productivity 4580
protective clothing. laundry rental opportunities 4590
protein stains removed from fabric. presoaking with protease 2868
quality control program at Shasta Linen Supply at Sacramento 6218
release point technology used to measure soil release from fabrics treated with soil release agents 4591
renovations at Robinson and Smith laundry. problem of water and sewer rates corrected by continuous batch washing system 1289
rental operators convert to continuous batch washers 4596
SGS Quality Control suggests improved laundering instructions on labels to protect garment shape and color 8522
shirts treated with polyvinyl acetate sizing. care precautions 7006
shirts. central fold system, quality points for rating shirts and shirt finishing, shirt laundering problems 2073
shirts. one hundred percent cotton. pinstripes and oxford, failure of reactive dyes during cleaning 7000
silk. modifying finishing processes to make fabric washable 2078
small mechanical problems lead to major chemical problems and poor laundering. leaky valve, improper water levels or temperatures 4592
soiling types on carpets and appropriate cleaning methods 3732
solvents. safe and legal concentrations of chlorinated, fluorinated and halogenated organic solvents in environment 3741
stain removing agents and methods 1300
static in apparel. causes and prevention 580
stone and acid washing laundry equipment 1266
Super Soft from Nisshinbo Industries, improved washing capabilities for fabric 6937
Superwash certification mark from Wool Bureau indicating washability 3750
symbols and manufacturing specifications for textile cleaning. problems 2064
tensile strength of fabrics used in uniforms after repeated laundering 1836
tests of washing cycles. wet tear strength, chemical damage, ash content, whiteness 1299
textile care industry exhibition, Laundry and Cleaning [1988]. continuous batch and dual solvent machines 6202
Ultra continuous batch washing machine for small laundries from Poensgen and Sulzmann 2870
uniform fabrics. deterioration after repeated launderings. tear strength 7517
uniform fabrics. soiling and soil removal tests 6758
uniforms. information to help industrial launderers market their product 7715
vanishing pinstripes and loss of colored yarns in men's oxford shirts. causes, alternate solutions 7002
ventilation. emission and waste heat removal 3952
washer-extractors from Cherry Tree for stonewashing 1986
water soluble dyed sweater bleeds after hand washing. mislabeled care instructions 6993
weak spots in woven material attributed to smooth yarns and not to the launderer or consumer 3742
wear index and relative economics of uniform fabrics 7518

wet processing jeans by commercial laundries 2063
Wilhelmina Textielreiniging industrial workwear rental laundry facility equipment, processing 4582
workwear rental industry. Klopman International ensures clean apparel, improved clothing hygiene 8914
yellowing of white shirts. causes 7716

LAVSAN IS A POLYESTER FIBER.

LEACRIL IS AN ACRYLIC FIBER.

LEAF FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS COIR)
date palm leaf fiber. X-ray study 3230
Kanebo's pineapple leaf fiber 12 20 811
PALF yarn. bleaching effects on tensile behavior and processing 4150
pineapple leaf fiber blended with polypropylene 7985
pineapple leaf fiber/acrylic blend on jute spinning system 3352
properties of mazri. investigation of twist on drying, moisture regain and retention comparison with jute and sisal 1614
sphagnum moss used as absorbent material by Johnson & Johnson of Montreal 4

LEATHER
changes in dyed leather color when exposed to ultraviolet light, causes, tests 4371
cleaning care procedures for leather trims, avoiding damaging heat and moisture 4372
comparison of seed and fish oils in leather tanning. methods and results 1803
cotton/leather combinations, problem with cleaning trim. possible solutions 6996
designer gloves [fall 1988], orders. leather, knits 1341
drycleaning trim. loss of design. causes 6998
durability, effects of processing on wear 6791
Fabrex. retro-trends in leather fashions 2646
fluid dye compositions of metal-complex dyes 5267
foil trimmings. quality control using government standards 4614
gloves. handmade 7677
heat resistance, Granitol for footwear, tests described 664
men's fashions [summer 1988] 612
permeability, acid tests 6045
polyurethane dispersion in leather coating 6157
relaxation, effect of moisture, formula to determine tension levels 672
strength, kinetic analysis of destruction under stress 6280
tannery solvent, dimethylformamide. ACTW seeks cancer causing label 1540
trim on garments. drycleaning problems 2057
variance in colorfastness in combination cloth and leather garments after cleaning 3733
vein marks on leather. causes 7003
water jet systems, ISIN and Cyberg, for cutting leather. features and architecture 2845

LEATHER SUBSTITUTES (SEE ALSO OTHER HEADINGS, SUCH AS COATED FABRICS, LAMINATED FABRICS, NONWOVEN FABRICS)
Amaretta synthetic suede by Kuraray. automotive interior applications 339
artificial leather production. progress and significance 2686
automotive fabric products. requirements, test methods 7075
Campen's Type IT-800 batch winding and unwinding system for nonwovens and synthetic leather operations 3489
colorimetric Raduga-1 device, accurate enough for production settings 5200
cotton/rubber, woven, rubber, nylon 6 (Kapron) belts for apparel use 340
fibrid formation of polyetherurethane for artificial leather production, copolymerization, properties 4052
fibrils in matrix composite polymer fiber to imitate bundles of collagen fibers 5098
heat resistance, Granitol for footwear, tests described 664
Lamous, technology and application 2685
limpness in Ultrasuede garments, effects of wear and cleaning on the fabric and separation of fusible interfacing 3737
Lorica. manmade versus artificial leather. Japan 6047
Lorica. polyurethane-based. physical and aesthetic properties 6046
microfibers used by Savina-Belseta and Asahi Chemical Industry for leather substitutes, filters, and apparel 4869
natural wastes and polyetherurethane for leather substitutes 5143
nonwovens production installed at Polish felt mill 5099
optimal calendering process for polyvinyl chloride artificial leather. Ridge analysis 4500
polyelectrolyte complex polymers, latex/polyelectrolyte artificial leather 6803
polymer application to artificial leather, model 6155
polymer coatings on woven fabrics for artificial leather production 491
polyurethane resins for artificial leather 2716
suedelike fabrics 2687
woven fabric carrier as leather substrate in footballs 1772

LEAVIL IS A VINYON FIBER.

LEGISLATION (SEE ALSO OTHER HEADINGS, SUCH AS AIR POLLUTION, COTTON, EMPLOYEE TRAINING, ENVIRONMENT, FLAMMABILITY, INDUSTRIAL HEALTH AND SAFETY, METRICATION, NOISE, PERSONNEL MANAGEMENT, REGULATIONS, SPECIFICATIONS AND STANDARDS, TEXTILE INDUSTRY, TEXTILE TRADE, TOXICITY, WASTE TREATMENT--EFFLUENT)
2800 Club in Spartanburg County, S.C. formed by chemical producers to comply with Title III of SARA 748
American Association of Exporters and Importers opposes [1987] Textile and Apparel Trade Act 2332
apparel care labels. British Standard BS2747:1986. imminent changes 578
bilateral trade agreement between United States and Mexico, agreement details 2376
British revamped patent regulations, effect on United States machinery makers 1530
Buy American Act discussed by United States Industrial Fabrics Institute members 794
Canadian Free Trade Agreement. United States opposition. industry fears 3163
carcinogen warning labels in California fuels formaldehyde controversy 6234
Caribbean Basin Initiative, possible expansion and duty free treatment under Congressional review 1561
character merchandising practices. legal ramifications of licensing in Australia 3992
chemical exposure. Permissible Exposure Limit Project in United States 6335
chemicals, toxic. community right-to-know. SARA Title III (Conf. Paper) 8850
Commerce Department's [1988] import limits for Chinese textiles, figures for various categories 2344
complex country-of-origin rules for Free Trade Zone with Canada 1573
compromise omnibus trade bill, victories for importers and retailers. industry reactions 3174
Control of Substances Hazardous to Health regulations and effect on British drycleaners. regulation of perchloroethylene 6215
cotton and manmade fiber products. United States import limits from Mexico 781
Customs user fee. changes being drafted because of GATT ruling that current fees inadequate 3164
EPA's Asbestos Hazard Emergency Response Act, effect on building owners and public 4804
European Single Act and impact on EEC textile industry 3971
flame retardant fabrics, EEC product liability legislation 3835
flammability standards for children's sleepwear in Australia 5421

free trade between Canada and United States. Dominion Textile supports 3978
free trade. United States and Canada. adjustment and transition provisions hoped for by Canadians 3977
French registration of textile creations. needs and practices 6422
garbage disposal. laws and provisions concerning 6379
German environmental statutes and drycleaning practices 2050
Hollings, Senator Earnest. profile. proposed textile legislation 770
illegal alien hiring prohibition, impact on apparel industry 3896
impact of new Superfund Amendment and Reauthorization Act (SARA) on textile companies 3198
import quotas and visas. interim Harmonizing System tariff schedule implemented 1579
job protected leave to new parents and disabled workers opposed by ATMI 2245
Pakistan. pollution from textile wet processing industry 6378
patent laws, French, problems. financial incentives for inventors 7253
patent laws. problems, enforcement 7254
phosphorus levels in water. control 5546
pollution standards, West German, create problems for launderers and drycleaners 3950
protectionist strategies 2333
Retail Competition Enforcement Act, reversing Monsanto versus Spray Rite decision 2244
solvents, effects West German environmental laws on the industry. recycling developing less harmful solvents 4755
Superfund Amendments and Reauthorization Act [1986]. control of chemicals used at manufacturing plants 749
Textile and Apparel Trade Act [1987] waiting House approval. ATMI's economist's views 5475
Textile Trade Bill. HR 1154. import legislation demand. interview with Carlos Moore, vice president of ATMI 2350
trade bill, textile and apparel. effect on Jamaican apparel manufacturing industry 1569
trade legislation. United States and European Community 3175
trade. Free Trade Agreement with Canada. implications 7951
trademarks as decoration or not on garments. court case and decision 7941
United States and Bangladesh. new import restraint limit for manmade fiber sweaters 2365
United States and China. import restraint limit for manmade Category 611 textiles 2369
United States and China. import restraint limits on manmade fiber coveralls from China 2356
United States and Costa Rica. level of restraint for cotton textiles produced in Costa Rica 2362
United States and Hungary. adjustment in current limit for some categories of wool textile products 2375
United States and Jamaica. charges deducted with textiles assembled in Jamaica 2352
United States and Korea. restraint limits imposed on some categories of textiles 2361
United States and Malaysia. categorizing silk blend and other vegetable fiber textiles 2374
United States and Maldives. import limits on wool sweaters 2353
United States and Mauritius. bilateral agreement on import restraint limits and transfer of charges 2359
United States and Northern Mariana Islands. reduction on imports of sweater will result in embargo 2373
United States and Pakistan. new export visa arrangement and exempt certification for some categories of textiles 2354
United States and People's Republic of China. agreement on silk blends and other vegetable fiber textile products imported 2358
United States and People's Republic of China. export licensing system extended to include sweaters 2351
United States and People's Republic of China. increases in import restraint limits 2370
United States and People's Republic of China. level of restraint for polyester and cotton yarn produced 2360
United States and Philippines. increase of restraint limit on Category 433 products 2371
United States export licensing system amended. Chinese exports. silk blends, vegetable fiber products 771
United States import limit for cotton and manmade fiber products from Thailand 789
United States import limit for cotton products from Soviet Union 787
United States import limits for cotton and manmade fiber products from Romania 775
United States import limits for cotton and manmade fiber products. Jamaica 790
United States import limits for cotton products from People's Republic of China 783
United States import limits for silk blend and vegetable fiber sweaters from People's Republic of China 778
United States import restraint limit for manmade fiber products from People's Republic of China 774
United States import restraint limits for cotton and manmade fiber products from Haiti 779
United States import restraint limits for cotton products from People's Republic of China 784
United States import restraint limits for manmade fiber products from Pakistan 782
United States import restraint limits for wool products from Czechoslovakia 776
United States import restraint limits for wool textile products from Poland 777
United States import restraints. Singapore cotton and manmade fiber 785
United States imports from Mexico. review of countervailing duty order 786
United States imports of viscose rayon staple from Sweden. review of countervailing duty 780
United States tariff schedule in Harmonized System Nomenclature. textile and apparel categories 2355
use of video display terminals. employees rights to increased benefits and health care 8848
West German textile industries and new air quality requirements 3947
West Germany. regulating solvents and other chemicals used in drycleaning 3949

LEVELNESS OF YARNS, SEE UNIFORMITY.

LIGHT DAMAGE, SEE PHOTOCHEMICAL DEGRADATION.

LIGHTFASTNESS (SEE ALSO OTHER HEADINGS, SUCH AS COLORFASTNESS)

acid dyes. absorption spectrum, lightfastness and washfastness, conditions for true color 2767
anthraquinone dyes 7616
automotive fabrics. blue wool sample for testing of polymeric materials. relative humidity problems 7095
automotive fabrics. outdoor testing cabinets developed 7089
azo dyes containing ultraviolet absorber 3626
azo dyes. photofading interaction with stilbene fluorescent brightening agent. effect of nickel salt treatment 2769
catalytic fading. casual effects among compound dyes 6860
cellulosic fabrics with grafted cationic groups compared 1211
Ciba-Geigy's Cibatex 4458 photodegradation inhibitor for polyamide carpet fibers 3606
cotton/polyester knit fabrics, finishing and dyeing, lightfastness testing 309
dye photofading. mechanisms. recent developments. dye and pigment sensitized photodegradation of polymers 3638
dyed nylon 6 yarns. effect of cross-sectional shape on lightfastness and light reflectance properties 4058
effects of optical brighteners on polyester dispersion. dyed yarn after sun exposure 5183
fading and degradation of dyed wool fabrics 7549
flame retardant cellulosic fabrics. new invention for dyeing these fabrics 7590
leather. changes in dye color when exposed to ultraviolet light.

causes, tests 4371
nylon. cause eliminated by dispersion dyes 5266
Original Hanau Xenoflash 150S tester. Model 150 comparison 7848
photometric method, light resistance of nylon, polyester, tests 4678
pigments. anthranilic acid. substituted hydroxy aldehydes. influence on shade and properties of pigments 7630
polystyrene developed to replace blue wool in automotive fabric exposure testing 7096
Quality Control International. light fading and colorfastness testing 2213
reactant fixable dyes on cotton fabric. fastness properties 8488
Sandoz Foron AS dye for polyester. lightfastness in automotive fabric applications 6906
silk coated with Parylene-C polymer evaluated 7281
silk stabilizers tested for effectiveness 7282
sulfur dyes, relation to dye concentration and fabric type 457
sunlight through automotive glass. actual and laboratory tests, results, discrepancies 7071
testing results adapted to Soviet system. kinematic formula 312
thermal and photochemical degradation of silk. naturally degraded silk samples compared with laboratory samples 7275
ultraviolet spectra in sunlight through automotive glass. objectivity of accelerated testing 7072
ultraviolet stabilizer moiety incorporated into commercial dyes used for synthetic fibers 7624
wool fabrics. machine washable printing 2775
wool. factors influencing 4020
wool. influence of pH on reflectance and photostability to sunlight 1950
wool. surface whitened shrink resistant cloth of improved lightfastness 2730

LINEN, SEE FLAX, HOME FURNISHINGS.

LOOMS (SEE ALSO OTHER HEADINGS, SUCH AS BEAMS, BOBBINS, CARPET LOOMS, HARNESSES, LOOMS--SHUTTLELESS, NARROW FABRIC LOOMS, PICKING AND PICKER STICKS--WEAVING, PILE FABRIC LOOMS, SELVAGES, SHUTTLES, WEAVING, WEAVING INDUSTRY, WEFT MECHANISMS, WINDING MACHINERY, AND UNDER SUBJECT HEADINGS OF SPECIFIC FABRICS SUCH AS FELT, PILE FABRICS, TERRY FABRICS)
accessories for looms. yarn tension and warp guiding systems at [1987] ITMA 3432
assessment of cotton/viscose underwear fabric from Textima 4331 loom 4350
AT-280-SB shuttle loom for industrial fabric weaving 195
automatic shuttle principles. weaving systems 1761
automation advancing loom designs. [1987] ITMA 4185
AVL Looms, on-screen computer design systems for handweavers 998
Bonas, Mueller and Mageloa elastic fabric looms 5094
cam driven looms. calculating shedding cam pressure angle 7411
circular. LLW 4 for leno weave fabrics. Lenzing 5874
computer systems for handweavers. Macomber looms 1000
computerized production management systems and loom efficiency 3427
converting the KF shuttle silk loom to water jet looms, potential and problems 4186
current technology, trends in weaving automation. weaving in the year [2000]. future trends 5893
Dan River, Cone Mills, and Fieldcrest Cannon mill executives discuss loom purchases 2589
developments in weaving machinery technology, present and future 6672
Dilo Di-Loop needle loom for surface structuring of preneedled felts for automotive industry 3488
dobbies, Jacquard machines, and auxiliaries manufactured by Staeubli 4154
dobby Series 2500 and 2600, Staeubli Programming System [18] 8806
dobby, rotary. Model RD800 electronically controlled. from Firntessile 8275
Dornier rapier weaving machine for technical textiles. applications 4181
Dornier. various types with AT electronics for microprocessor control 4182
drawing-in machine computer-controlled. Uster Delta CC 6642
dynamic load, vibrations, equations to calculate six frequencies of free oscillation 5012
electronic automation of Dornier looms 1756
electronic control. automatic logging. data performance 2576
electronic jacquard heads and reading systems. advantages and drawbacks 8278
electronic jacquard machine from Mason Textiles and Bonas Machinery. features 3433
evaluation for ability to manufacture fiber pre-forms for gas turbine engines 7412
evaluations by Soviet experts of domestic and foreign loom and weaving preparation machinery 4187
filament yarn weaving, requirements for trouble-free 4188
formula, structural coefficient, analysis of loom suitability 5157
four-bar linkage mechanism. measurement deviation and motion error 1753
heddle dobbies, dual elevating. kinematic analysis and usage parameters 199
high speed weaving. demands on smooth and textured filament yarns and wrapped yarns 5894
hydraulic and nozzle looms, components to control the weft 200
inside conjugate cam shedding mechanism. analysis and design 201
interference of shuttle upon entering or leaving shed 5030
Italian machinery developments. weaving, spinning, dyeing 4740
ITMA [1987]. detailed survey 5593
ITMA [1987]. highlights of new developments 3448
ITMA [1987]. highlights. spinning. weaving. knitting 2306
ITMA [1987]. looms and accessories 5887
ITMA [1987]. looms exhibited 2571
ITMA [1987]. preview. technical information 7898
ITMA [1987]. shed formation highlights 1760
ITMA [1987]. technical advances 999
ITMA [1987]. trends in looms 8258
ITMA [1987]. trends. spinning and weaving highlights 1522
ITMA [1987]. weaving and knitting technology trends 1730
ITMA [1987]. weaving machine accessories 5022
ITMA [1987]. weaving machine trends and highlights 1759
ITMA [1987]. weaving machinery. development trends 5889
ITMA [1987]. weaving technology refinements, microelectronics and computers 2574
jacquard mechanisms with electronic control 2577
jacquard, electronically controlled, from Bonas for fullwidth weaving 6653
jacquard. CR 620 and CX 860 from Staeubli. software systems 5876
jacquard. Kingclip Jac 2000 card handling device from AGMueller 6652
jute problems in weaving. high speeds. Tegard 1001 machine by Gardella 6669
kinematic and dynamic parameters of striking mechanism. possible increased speed 1762
Leno 2 circular loom from Starlinger and Company 5871
let-off device operation improved 3434
let-off, electronic and mechanical warp. whiproll dynamics. filament yarns 4175
Luwa's Pneumablo blower/suction Model D traveling cleaner for weaving machinery 6646
machinery developments. automation of weaving processes. weaving success criteria 7413
microshuttle mechanism. mathematical model 1763
modification of take-up mechanism of loom to prevent weft defects 8259
multiaxial raschel machines at [1987] ITMA. Karl Mayer. industrial fabrics 5966
needle looms from Dilo for web bonding 6722

noise from shuttle looms 756
People's Republic of China. design ideas for modern looms. high cost of Western looms 1758
performance, past and future. determining factors 3437
Picanol GTM. PSO Prewinder Switch Over system for automatic repair of weft stops 4183
problems in development of fully electronic jacquard mechanism 7177
Rieter and Schubert & Salzer looms at ITMA Paris 2572
rotary dobby, electronically controlled RD 800 from Fimtessile 5895
self-lubricating nylon parts. Graflon 100 oil 3435
Series 2500 negative dobby and Type 2660 positive rotary dobby looms. Staeubli 4184
settings. tests for optimal parameters for energy conservation. warp tension 4211
shed control mechanism created by determining the beat-up force 225
shedding technology, development. dobbies 4220
shipments summary [1987]. world textile machinery market highlights 8841
shuttle loom versus air jet loom. economic considerations and comparisons 1004
shuttle looms. energy consumption 6654
shuttle looms. noise reduction study 2319
silk looms. pick movement 6662
Staeubli's Excenter, dobby, jacquard sheds. computer control 197
Staeubli's Type CF 420 and CR 520 Jacquard machines 4201
Sulzer Ruti loom division. marketing, development, service, production concepts 3868
Sulzer Ruti. looms worldwide. world share data 3867
Sulzer-Rueti exhibits at ITMA [1987] show 997
Sulzer. interview with President Fahrni 7113
Swift Textiles, Thomaston Mills, Avondale Mills, and the Bibb Company, recent loom purchases 2591
take-up motion. BTRA modification. improved loom performance 3436
tappet wheel on type 1515 loom. end product development 1005
Tara handloom for greater productivity in Indian textile industry 2575
tests of Sulzer-Rueti PU 85 VSDKR loom in the Bewelana Wool Industry Institute at Bielso-Biala 202
Texmer's spare parts, components, and current line of products 198
triaxial. method for designing curve on warp tension ring 8328
type 1515. design and built-up tappet 2578
used to determine tear load, width, surface density parameters for new woven wool fabrics 4179
warp breakage indicator 8838
warp shed angle. ATIRA warp Shed Protractor 8260
weaving machinery. geometric principles 4158
weft thread movement on Czech looms. measurement methods 7414
yarn stress in selvage and temple areas 4213

LOOMS--SHUTTLELESS (SEE ALSO OTHER HEADINGS, SUCH AS CARPET LOOMS, NARROW FABRIC LOOMS, PILE FABRIC LOOMS, SELVAGES, WEAVING, WEFT MECHANISMS, AND UNDER SUBJECT HEADINGS OF SPECIFIC FABRICS SUCH AS PILE FABRICS, TERRY FABRICS)

air flow control in air jet looms 2594
air jet L5100 loom from Sulzer Ruti 3444
air jet LA40 loom from Nissan Textile Machinery 3439
air jet loom designed on basis of shuttle loom for silk 1770
air jet looms at Thomaston Mills' Peerless Division for sheet production 2239
air jet looms at Woodrow-Universal increases productivity by 10 percent 8834
air jet looms in Japanese weaving industry, increased popularity due to versatility. various Japanese air jet systems 2582
air jet looms versus shuttle looms. cost comparisons, economic considerations 1004
air jet looms, picking time versus air consumption 1769
air jet looms. weft and warp yarn loads 5891
air jet ZA-200, warp tension tested. let-off motion analyzed 203
air jet, L 5100 from Sulzer Rueti 4218
air jet, six-color. ZA 205, and terry cloth ZA 207T by Tsudakoma 6657
air jet. air flow velocity in closed constrictors reduce energy consumption, increase weft insertion rate 5873
air jet. air flow velocity 7419
air jet. jet characteristics. special reed system 2581
air jet. Jettis NF-M range and features 7418
air jet. L5100 looms from Sulzer Rueti 1755
air jet. Lindauer Dornier Model DLW loom 8261
air jet. noise 756
air jet. PAT-A loom from Picanol. PRA1 subsystem and Pick Repair Automation 4191
air jet. Picanol PAT-A loom with automatic weft break repair system PRA 1 subsystem 5881
air jet. Picanol's PAT-A loom and Pick Repaid Automation 3442
air jet. Toyoda Model JA design. effect of yarn and related equipment 7416
air jet. weft guide system. jet characteristics 2580
air jet. yarn characteristics and machine design 7417
automation advancing loom designs. [1987] ITMA 4185
ball bearings on two beam looms, reduced tension unevenness, vibration, defects 4193
computerized production management systems and loom efficiency 3427
copolymers for high speed 4165
cyclic diagram calculation, shed formation, heddle action 4204
deformation determination methods, comparison on repair loom, tests 4205
Dornier systems to be introduced to United States textile industry 8930
evaluation for ability to manufacture fiber pre-forms for gas turbine engines 7412
filament yarns. exceeding yarn strength results in breaks and overstretching 3454
filling feeder yarn advancement system from Tecnomatex 3445
gripper looms. Sulzer Ruti P 7100 series of improved gripper weft insertion 3430
high speed weaving. demands on smooth and textured filament yarns and wrapped yarns 5894
history of looms, shuttleless loom design, introduction 4194
improved Draper J4000. promotion with Vamatex, Saurer looms 8265
India. status of machinery with respect to world development 7415
Italian machinery developments. weaving, spinning, dyeing 4740
ITMA developments in projectile, rapier and air jet looms. review 1006
ITMA [1987] exhibit highlights. air jets, water jets, rigid and flexible rapiers, projectiles, accessories 196
ITMA [1987]. highlights of new developments 3448
ITMA [1987]. jet looms. four color air jet. six color machines debut 3438
ITMA [1987]. looms and accessories 5887
ITMA [1987]. looms exhibited 2571
ITMA [1987]. preview. technical information 7898
ITMA [1987]. rapier weaving advances and developments, exhibitors 5010
ITMA [1987]. weaving machine accessories 5022
ITMA [1987]. weaving machine trends and highlights 1759
ITMA [1987]. weaving machinery. development trends 5889
ITMA [1987]. weft break repair on air jet looms 6671
jacquard and dobby reliability tests, requirements 4195
jacquard loom, Verdol Aneares 250-FO. settings and adjustments 204
jet looms and weft accumulators for high speeds. problems 5896
Kontis C4-330 multiple shed loom in Perla Cotton Weaving Mill, abilities, computer control 4190
leno motion for interlacing cut selvages on shuttleless looms. Grob Mirobor 5882

let-off device operation improved 3434
machinery developments. automation of weaving processes. weaving success criteria 7413
People's Republic of China. design ideas for modern looms. high cost of Western looms 1758
performance, past and future. determining factors 3437
production increases. reduced yarn breakage and labor time. data on cotton weaving 224
projectile, rapier and air jet. Sulzer Rueti's new and upgraded looms for [1987] ITMA 3431
projectile, rapier, jet weaving methods. computer integration, monitoring systems 6658
projectile. Model P7100 looms from Sulzer Rueti 8264
projectile. P7100 weaving machines from Sulzer Rueti 1752
projectile. Sulzer P7100. trials and operation 5016
rapier and projectile looms. weaving speed warp and weft tension 2586
rapier displacement, early release of weft yarn, formulaic method 5017
rapier Lindauer Dornier model H loom 3440
rapier loom, IRL Wilson & Longbottom 5883
rapier looms. Sulzer-Rueti G6100 type series. details 1003
rapier MAV loom. fabric suitability study. appraisal method 2579
rapier rigid. Dornier looms 5014
rapier, slay, excessive force on roller. ascertainment by computer program 4196
rapier. cotton fabrics from low density yarns on ATPR-100-4 loom compared to fabrics on shuttle looms 213
rapier. Dornier loom and varieties. problems with yarn 4199
rapier. Dornier loom for technical textiles 4197
rapier. double. Dornier loom good for industrial fabric production 6673
rapier. double. Dornier machine for technical textiles 5013
rapier. DSK Fischer loom, amount of flexibility in rapier, determination method 4189
rapier. dynamic motion. unfavorable influences 206
rapier. flexible. loom model G 6100 from Sulzer Rueti 5875
rapier. flexible. Master SM 93 from Somet 5879
rapier. flexible. Master SM 93 model range from Somet 5872
rapier. G6100 weaving machines from Sulzer Rueti 1754
rapier. Master SM 93. Somet company 5877
rapier. model G6100 by Sulzer Ruti 6659
rapier. Model H loom from Lindauer Dornier. adapts to wide range of fabric weights 3429
rapier. Model H range rigid rapier looms from Lindauer Dornier 5880
rapier. Model MTDJ-EN loom from Mertens and Frowein for manufacture of carpets 6643
rapier. Model PM100 loom from Crippa Mario 8263
rapier. modifying the MAV-L-KM-206 loom to weave flax fabrics 205
rapier. multilevel shed dobby looms, parameters, calculating limitations 5032
rapier. Nuovo Pignone's TP500 Mark 2 loom with compound sley 3441
rapier. Picanol GTM loom with PSO weft yarn breakage elimination 6655
rapier. rigid by Dornier. solution to problems in weaving multifilament yarns 6670
rapier. Somet company 5878
rapier. Sulzer Ruti G6100 flexible loom 3443
rapier. type S-D 400SE rigid looms from Saurer-Diederichs 6660
rigid. rapier. Model VMe and VMm22 double velvet loom from van de Weile 8276
rotary screw air compressors reduce energy costs, lower production time 5540
Schneider-Gerster J/HE line of electronically controlled jacquard machines for narrow fabric weaving 6656
shipments summary [1987]. world textile machinery market highlights 8841
shuttleless developments in loom engineering, weft insertion. future of increased automation 8277
shuttleless. weft mechanisms on looms. control of two weft yarns 4221
Soviet weaving industry. automation and computer use 5025
STB 4-220, parameters for weaving one and a half layered wool fabric 228
STB draw looms, productivity, influence of weft mechanism, lay, picker 5015
STB loom. improved weft device 5038
STB sensor system for draw loom, control, components 4198
STB shuttleless draw looms with jacquard devices, synthetic fiber weaving 4192
STB. dual insertion weft mechanism, operation, design, analysis 4215
Sulzer Rueti's new projectile, air jet and gripper looms at ITMA in Paris 2573
Sulzer Ruti loom division. marketing, development, service, production concepts 3868
Sulzer Ruti. looms worldwide. world share data 3867
survey by ITMF. sales up 6374
Swiss textile machinery developments. high praise from experts 5537
techniques of modern weaving, trends in rationalization 1764
technological advances at ATME-I [1988]. Picanol, Sulzer Rueti, Pignone 5089
warp tension uneven when shed open, tests, method to determine, prevention 4212
water jet and air jet looms by Nissan. studied for weft insertion performance 5018
water jet weaving machines. technical evolution and future prospects of existing models 5884
water jet. advances since [1967] ITMA 5885
water jet. Elitex H 175 M loom for continuous filaments 7420
water jet. Model H 175 M series looms from Strojimport 8262
water jet. optical sensor and control system 4219
weft insertion. designing efficient devices for faster machines 7406
weft mechanism, NEM-1, for tension control on STB2-250Shl loom 230
weft mechanism, USK-1 device for electronic control 232
wide projectile machines for sheeting production at Bibb 8835
yarn tension fluctuations during weft insertion. loom speed limits 1007

LOOPING MACHINERY, SEE KNITTING MACHINERY.

LUBRICANTS, SEE CHEMICAL AIDS TO PROCESSING, LUBRICATION.

LUBRICATION (SEE ALSO OTHER HEADINGS, SUCH AS APPLICATORS, CHEMICAL AIDS TO PROCESSING, AND UNDER SUBJECT HEADINGS OF SPECIFIC MACHINERY)

alternatives to sizing. application of ethylene oxide lubricants on sectional warping machine 4995
Cirnedol 9615 and 9616 from Vickers. new grade lubricating oil minimizes atmospheric pollution 3457
hooks for industrial sewing machinery. lubrication, installation. problems 4558
Industrial Precision Ltd.'s Swet Rod applicator for warp beam lubrication 3410
Kluber Lubrication. anniversary [30th]. research and developments in specialized lubricants 8836
knitting open end yarns and spring needle wear 5526
lack of foreign oil and lubricants for imported textile machinery. substitution 4750
Lenzing viscose fibers incorporating carbon 3315
looms. self-lubricating nylon parts. Grafion 100 oil 3435
lubrication system and tests, no oil spots, operational systems 5074
manmade fibers. spin finishing. finishing agents. static control 6504
Memminger Pulsonic II pressure oiler 247
oil, grade to minimize atmospheric pollution for knitting machinery needles. Vickers 3953
oiler, pressure, for circular knitting machines. Pulsonic 2 unit 5933
oleochemical surfactants and lubricants profile 8556

Optimol High Performance Lubricants. textile machinery applications 1528
Optimol Microflux Lubricants. hydrodynamic lubrication technology 1529
pressure roller, improved battings with roller lubrication, humidity 4902
Pulsonic 2 pressure oiler for machine lubrication from Memminger 5930
Pulsonic Mini 2 and Pulsonic 2 units for lubrication of circular knitting machinery 255
rotor spinning. fiber friction levels studied, data used to develop lubricants 4935
synthetic fibers. frictional coefficient and hydrodynamic lubrication 103
TEXTOL range of lubricants and branded oils. meets demands of modern machinery 265
warp yarn sizing replaced with simple yarn lubrication step 7371

LUREX IS A METALLIC YARN.

LUSTER
carpet yarns. relationship to fiber tip configurations 168
factors affecting luster 1842
instrument for testing luster in fabrics 7078

LYCRA IS A SPANDEX FIBER.

MACHINE INTERFERENCE, SEE TIME STUDY.

MACHINERY, SEE CLEANING OF MACHINERY, TEXTILE MACHINERY, AND UNDER SUBJECT HEADINGS OF SPECIFIC MACHINERY AND PROCESSES.

MAINTENANCE (SEE ALSO OTHER HEADINGS, SUCH AS CLEANING OF MACHINERY, ELECTRICAL EQUIPMENT, LUBRICATION, AND UNDER SUBJECT HEADINGS OF SPECIFIC MACHINERY)
computers in hosiery mills 4515
cotton fluff removal from clearers 8143
diesel engines. lubricant oil analysis 7173
printing and finishing operations, energy conservation, effluent control 6819
puller drive assembly on Union Special Series 5000 and 600. flatbeds. lubrication, main-shaft driven rotary gear system 2045
regular maintenance of sewing machine motors 5533
slashing components. troubleshooting guidelines 1742
textiles, damage. causes and prevention 2074
torque settings, procedures for Union Special 600 series sewing machines 5390
vibration measurement. applications as practical maintenance regimen 7903
vibration measurement. prediction of machine maintenance requirements 3938

MALI TECHNOLOGY, SEE STITCHBONDED FABRICS.

MANAGEMENT (SEE ALSO OTHER HEADINGS, SUCH AS AUTOMATION, COMPUTERS AND PROGRAMMING, COSTS, EMPLOYEE TRAINING, FORECASTS, INDUSTRIAL ENGINEERING, INDUSTRIAL HEALTH AND SAFETY, INFORMATION, INVENTORY CONTROL, MARKETING, MATERIALS HANDLING, MILL BUILDINGS, OPERATIONS RESEARCH, PERSONNEL MANAGEMENT, PRODUCTION CONTROL, QUALITY CONTROL, TEXTILE MACHINERY, TEXTILE MILLS, TIME STUDY, WASTE TREATMENT, WATER, ETC.)
2800 Club in Spartanburg County, S.C. formed by chemical producers to comply with Title III of SARA 748
accounting calculations 3888
accounting, internal profit and loss and standard cost 8771
acquisition of WestPoint Pepperell by J.P. Stevens. split of stock and divisions among companies 4798
adult incontinent products, refinements, market expansion 2960
advice to mill managers on how to cope with new minimum wage law 6339
agreement between Greenwood Mills and Permna Color Corporation, merger 3889
Amalgamated Clothing and Textile Workers Union victory at J.P. Stevens' towel manufacturing plant in Drakes Branch, Virginia 3104
Amalgamated Clothing and Textile Workers Union voted in by Furtex factory workers 3105
American Thread Company, profile. management, marketing, facilities, equipment 6557
American Velvet. participatory management and profit sharing program 2246
Andre Richard, transformation into leading supplier for coordinated bathroom ensembles, acquisition by Springs Industries 3800
apparel industry, CIM Linkage Council, voluntary standards. executives give views 5477
apparel industry, United States. strategy to compete with imports, improve market share 5564
apparel manufacture. balance of quality, productivity, costs, and delivery 6967
apparel manufacture. computer systems to improve real time production control 8757
apparel manufacture. Quick Response and garment dyeing 6884
apparel manufacture. Schiesser's mill organization and production 700
apparel manufacturers. new strategies in management and technology 1496
apparel manufacturing, executive from Esprit, V-8 Group, Shah Safari interviewed 5415
apparel. materials handling costs. computer model for effective strategies 6972
apparel. modular manufacturing, Japanese production process adopted by major United States companies 5351
apparel. Oxford research and development products suitable for small manufacturers. Quick Response 5414
apparel. the Vivian Chan Shaw knitwear company from Australia. profile 5422
Aristoc, hosiery firm, achieves British Standard for quality control. uses registration to aid management and promote product 7121
automation. installation based on process costs 4712
balance between long range planning and short term goals makes for high productivity and product quality 3890
bar coding system for apparel manufacture data processing 3910
BASF's commitment to rayon fiber operations reaffirmed at press conference 3901
Bear Brand hosiery and company image restyling 7022
Bee Line Products of Dublin. solution of problems created by volume manufacturing 2813
Benetton's multimillion dollar warehouse. goals and functions 3686
Bibb Company, acquisition of J. P. Stevens assets from WestPoint Pepperell 5488
British textile companies. capital spending plans [1988], updating technology not increasing capacity 1480
British textile manufacturers invest in dyeing equipment to keep up with fashion trends 5231
Burlington Holdings, sales and earnings for fiscal quarter [1988]. losses from buying Burlington Industries 3902
Burlington Industries agrees sale of Industrial Fabrics Division to Taka Corporation and Porcher Textile 3085
Burlington Industries' agreement to sell its Canadian textile operations 7866
Burlington Industries, financial outlook since buyout. management strategies 7865
Burlington sells Masland Auto Products Division. other assets already sold or to be sold 2249
Burlington to sell Industrial Fabrics division to Takata. leaving industrial fabrics field 2248
Burlington's agreement to sell apparel fabrics portion of Blended Fabrics Division and Prints Division 2250
Burlington's plans to upgrade yarn operations and phase out

weaving in Caroleen plant. reasons and plan details 2247
Burlington's sale of Precision Fabrics division which produces various fabrics. sales details 3087
Burlington's sale of W.G. Lord auto fabric plant to J.P. Stevens. Stevens' expansion plans 3086
Cannon and its Monticello discount label. changes in distribution in retailing home textiles 3088
Cannon County Knitting major expansion. all electronic knitting machines 4699
capital, growth and succession problems in textile industries 7118
Carisbrook Yarn. management and operational changes, products, future 7106
Carolina Creations. manufacturer of quilted fabrics for home furnishings 2628
CB Sports. history. expansion, and use of computers 7662
Celanese Fibers' integration with Hoechst Celanese. consolidation of divisions, company products, facilities 2251
Celanese Fibers. quality improvement program 3882
cell production system at Alpargatas in Brazil, operation process 7675
Chargeurs' accepted bid for controlling interest in the Roudiere Group 1481
chief financial officer. job description 3096
CIM in textile manufacturing. topics of the First Reutlingen Textile Management Colloquium 3908
CIM systems from Uster 7137
Clothing Economic Development Committee's guide for profitable planning in clothing industry 2802
Cluett, Peabody, reorganization plans 1482
colorimeters. factors to consider when purchasing 4423
Columbus Mills forms contract carpet division called Lotus Carpets 8660
competitiveness and its influence in the United Kingdom apparel industry 6340
computerized information system for textile mill 7153
computerized planning and control, India's needs 2264
Conquest Carpet Mills acquired by Penta Enterprises. company products, management restructuring 6331
costs estimation in complex manufacturing situations 6336
cotton industry. computer controlled planning and marketing 3915
Courtaulds Hosiery changes name to Aristoc. introduces new brands 4615
Courtaulds North America. new electronic data interchange program 3883
Courtaulds restructures high performance fiber divisions 7942
Courtaulds. financial status and outlook 1474
creativity in manufacturing technology, marketing, and product development to increase competitiveness 1489
criteria for technological change, industry decisions, effect of technology 3068
Crompton Company closes operations. company assets, reorganization under Chapter 11, selling history 6342
cutting operations. reducing costs 3097
Dan River's niche marketing strategy, upscale designer licenses, collections 6255
Daniel Hechter Company profiled. product diversification 1493
Dawson International. history and current status as U.K. knitwear company 3089
defining fundamentals of effective management organization, elements 7856
Deming management method 3864
designing products. consumers and designers 1490
Dicey Mills manufactures residential upholstery fabric 6734
Dowling Textile's progressive personnel programs, advantages 3697
drycleaning industry. Data-Becker's Kalkumat program for the drycleaning industry 4563
Du Pont management decided on name for nylon based on marketing considerations 5693
Du Pont modernizes and upgrades Dacron staple and filament polyester capacity 3090
Du Pont uses Dutch plant to produce Dacron filling material 7945
Dundee Mills, centennial. company structure, management, products 6332
Dundee Mills. development over one hundred years of operation, corporate philosophy 3073
dyeing industry. planning and implementing integrated computer system 722
effective managers, changing requirements. increased initiative, creativity, flexibility 3891
efficiency of Nisshinbo spinning mill 2517
employee motivation, feedback, and involvement in planning 3892
environmental audits 752
exhaust dyehouse activities analyzed with computer to increase profit 8813
expert systems in finishing industry 4396
Exxon to purchase ICI's geotextile division and Terram-producing plant 6549
fabric manufacturers. strategies to use color to meet fashion demands. producer dyeing, color forecasting, pre-coloring 1382
Fiber Industries acquires Fortrel trademark and Celanese plants 1660
Fiber Industries purchases Celanese plants, Fortrel trademark 4701
Fiber Industries 3107
Fiberweb and James River, production and marketing of nonwovens 1876
financial planning, necessary steps to success 5480
finishing. dynamic controlling method, goal-setting 705
flexible management in finishing plants 3098
Flexible Manufacturing System for apparel manufacturers, Quick Response, lower inventories 6965
French textile companies. capital spending plans. investment programs, effect of ITMA 1483
FTC's approval of Celanese's polyester concern to Sterling. merger details, future company plans 2252
functional profit contribution 4705
garment dyeing, increasingly popular concept for the domestic industry. Quick Response, shorter turnaround time 4430
General Service Administration work to resolve contract problems with carpet industry 2253
Georgia and Alabama mills, limited effect of technology at ITMA on capital spending plans 1484
Girbaud North America. apparel marketing and retail merchandising business 3779
Girmes installs comprehensive information processing system 8800
Glendale Spinning Mills, Ontario. reorganization by First Corporate Equity Group 3091
Great Britain. trends over past twenty years and management strategies to deal with trends 2271
Group GFT. use of fashion designers in market oriented management strategy 1477
guidelines for middle and upper managers of manufacturing companies, coping with change in their job functions 707
Hanes Hosiery. automated data collection system using IBM PC AT and IBM 4381 for payroll, time, and attendance 3118
Hartwell's junior sportswear divisions. management and marketing strategies 2964
Henry I. Seigel Company profile to illustrate need for flexible manufacturing in rapidly changing apparel climate 3682
high technology and competition with low wage countries. United States successes 5350
Hills Department Stores' commitment to EDI. reasons and goals 7740
Hoechst Celanese plans for merged fiber business, three-division organization 1485
home furnishings industry. product diversification's effect on major companies, survey of representatives 4706
human resources management in apparel industry 3684
Hungary's Habselyem mill. optimizing resources and machinery 8746
impact of Quick Response on major apparel retailers and manufacturers 7670
incentive systems. design, implementation, maintenance 5481
industrial laundering. move away from drycleaning reasoning

behind 6207
innerwear. Jockey International, profile of successful corporate expansion, markets, and products 7665
integrated information system to improve competitiveness of textile industry 3875
International Wool Secretariat. promotion of wool jersey 1494
inventory control. optimum levels. economic ordering quantity formula 5511
Italian textile mills' capital spending plans [1988]. problems due to higher prices and sagging export market 2254
ITMA, limited effect on capital spending plans of North Carolina and Virginia mills 1534
Iva Manufacturing profile. investments in automation. long term ROI strategy 5355
J. P. Stevens buyers divide company 6397
J. P. Stevens buyout proposed by senior management group. proposal details 2255
J. P. Stevens. leveraged buyout by company to avoid outside raiders 2243
J. P. Stevens. leveraged buyout by senior management 2256
J. P. Stevens. sales figures, proposed senior management buyout 3904
James River and Holmens Bruk joint venture 3033
Jantzen's Quick Response program and future plans 7663
Japanese Textile mills, capital spending plans. Murata's Mach Winder and air jet looms 1486
Job Change Incentive management strategy resulting from Quick Response technology 3877
job costs in marine products industry 8772
job protected leave to new parents and disabled workers opposed by ATMI 2245
Joseph D. Moore receives NCSU's Watauga Medal 3192
JPS Textile Group, acquisition of various J. P. Stevens divisions after buyout 6398
JPS Textiles Group created from J.P. Stevens divisions acquired after WestPoint Pepperell buyout 7108
Just-In-Time management strategy. implementation guidelines 3865
K-Mart home furnishings division. Martha Stewart signed on as new spokesperson 648
leasing manufacturing equipment, advantages 7666
Lee Company profile. Lee Global Image junior denim line. twenty-five million dollar advertisement campaign 7018
Leslie Fay's Sanford Mazer, vice president of manufacturing, profiled 1487
Levi Strauss installs computer production tracking system 7867
Levi Strauss's move to a four day work week. industry reaction and company reasons for cutback 3067
Liz Claiborne. annual report. sportswear leading sales. accessories, bridge, fragrance, men's wear divisions 4508
logistics and Just-in-Time technology 7163
logistics at Schiesser 8773
management roles in integration of the automated manufacturing environment 7889
Manufacturing Resource Planning for parts and products (Conf. Paper) 8764
manufacturing strategies for disposable diaper market 3079
marine fabric makers. new business strategies 4368
Mensley Group Limited. product development for knitwear company 3884
Mexico and United States cooperative production efforts. Maquila program 5576
modular manufacturing, paper by Mike Brent given to American Apparel Manufacturers Association summarized 3895
modular manufacturing. concept and advantages 708
Molnlycke acquires Ancilla BV and Peaudouce, becomes leader in European personal hygiene market 2958
Monsanto's sale of Hale Manufacturing assets to Polymer Corporation 3885
Mossley Incorporated, novelty yarn producer. quick response strategy 4149
motions toward eventual merger of J.P. Stevens and WestPoint Pepperell 3099
motivation and efficiency. factors responsible for poor worker motivation 5483
Nedlin plant in Rotterdam. work transportation and management approach 4581
new computer maintenance program at Du Pont mills reduces costs, improves service 7102
Newhey carpets. expansion 5440
Nipon, Leslie Fay merger 1337
Nisshinbo Industries and Kanematsu-Gosgo open Nisshinbo California, cotton fabric and yarn mill. details 3092
Odermark, apparel manufacturers. part of West German F. W. Brinkmann. strategies 2814
Pakistan. evaluating and improving productivity 5484
Pillowtex Corporation. company development, merchandising, marketing, and retail strategies, products 2257
planning and scheduling board for apparel manufacturers 3905
plant. information processing system. flexibility, productivity, quality control 4704
polyethylene terephthalate necking behavior, during high speed extrusion 6552
polypropylene fiber extrusion plant. priorities, guidelines, techniques 3869
polypropylene manufacturing plant, management guidelines and process descriptions 2465
printing processes managed by personal computer 5515
processing. optimum balancing of machinery, case study 8000
product quality and innovation. global industrial strategies 1491
production management, computer aided, in weaving. developments 5866
productivity and flexibility as management goals 8820
productivity and innovation 8774
productivity. 80/20 rule and its effect on unit production, reduced inventory 6968
productivity. strategies to increase 3070
productivity. worker behavior and organizational structure of businesses 3893
profile of Bibb's new president 8835
profitability, analysis 7174
proposed buyout of J.P. Stevens by senior company executives, plan details 3076
purchasing 3880
Quaker Fabrics concentrates on textured jacquard and dobby upholstery fabrics 2650
Quality Assurance Process, apparel industry. benefits 5485
quality assurance throughout manufacturing process 7044
quality control at Celanese Industrial Fibers 6363
quality control at Dexter Corporation 6364
quality control in knitting sector 7119
quality control manual. requirements and organization 7891
quality control program at Shasta Linen Supply at Sacramento 6218
quality initiative program based on British Standards 5750 for knitting industry 4707
quality management requirements. knitted merchandise 8775
quality management. statistical process control techniques 8823
Quick Response and knitting industry, impact of technology on cost of training 3886
Quick Response as marketing tool for fashion industry, acceptance by apparel and textile industry 7669
Quick Response combined with partnerships to produce competitive industries in textiles, apparel, and retail 698
Quick Response in Japan. lack of need for standardization among mills 8825
Quick Response technology and machine intelligence 7115
Quick Response technology. United States industry implementation 7114
Quick Response, Cone Mills implements. goals and achievements to date 4715
Quick Response, status reviewed by Kurt Salmon Associates 1476
Quick Response. acceptance among French distributors and manufacturers 8756

Quick Response. challenge to management 3093
Quick Response. Japanese study on expert systems 8826
quick response. manufacturer, retailer views 3899
restructuring of costing, cost accounting, and profit-and-loss statements in textile plant management 3894
return on investment analysis, factors to consider when buying equipment 7863
Rhone-Poulenc expands German operations to produce Setila silk substitute 7348
Roanoke Valley union members organize union fight at J. P. Stevens towel manufacturing plant in Drakes Branch, Virginia 3106
Russell Corporation to buy Quality Mills. details 8786
Sara Lee, owner of Hanes brand name, agreement to buy Adams-Millis maker of Hanes casual hosiery. agreement details 2258
Schaeffer produces software to upgrade production, processing, and stock flow in textile finishing industry 5502
sewing room modernization. labor resistance to automation 709
Shaw Industry targets different market segments with consolidated contract carpet division 3009
small business textile production 3100
small fiber extrusion plant 8768
software for apparel industry. survey software companies in United Kingdom 4716
South Carolina mills, limited effect of ITMA technology on capital spending plans 1535
Springs Industries' purchase of Uniglass and Marglass facilities for fiber glass fabrics from United Merchants and Manufacturers 3094
Springs to buy United Merchants and Manufacturers' fiber glass fabrics facilities and Thalco and Glascoat distribution operations 706
standards of performance, accountability for solving problems, management performance 5517
Statistical Process Control for manufacturing management (Conf. Paper) 8765
Statistical Process Control implementation (Conf. Paper) 8761
statistics. compilation and use in evaluating and planning 8776
Stetson sale to Resistol approved. specifics of the sale 1488
strategies for modernizing management to utilize modern industrial technologies 7164
strategies, The Elastic Corporation of America's success analyzed 5482
strategy for apparel manufacturing success 6973
strategy, Japanese. textiles, related industries 7104
structural change in the international market 8784
successful start-ups. foundation for success, planning 7120
Sulzer Ruti loom division. marketing, development, service, production concepts 3868
Sulzer. interview with President Fahrni 7113
takeovers, J.P. Stevens and WestPoint Pepperell, Sara Lee and Adams-Millis 3156
Tennessee Eastman's Acetate Yarn Department. quality management 7116
tennis strings, extruder from Vollmer Tennis Strings 5633
Tennyson Textiles, Australian fabric printer, products and future plans 5492
testing methods and standards in industry adapted to technical advances in science 4647
Thomaston Mills, small, private, United States mill. sales, strategies, products 7126
Tootal. United Kingdom textile group 2259
Tritex International and their products 6695
Truetzschler. manufacturer of machinery for preparatory plants 8750
Tultex opens new plant in Virginia to consolidate facilities 2260
Tuscarora Yarns, management changes 7860
ultrahigh modulus filaments. aromatic copolyesters and polyethylene terephthalate co-p-oxybenzoate 7323
United Kingdom, dyeing and finishing industries. status. advantages of investment in machinery 3561
United Kingdom. analysis of manufacturing capacity 7172
United States carpet industry 7117
United States. offshore manufacturing pitfalls 8770
United States. reducing lead times, making apparel manufacturers more competitive 8584
Universal Maschinenfabrik. company and product profile 3480
Valstar installs production control at Don and Low. fabric producer 5505
vertical integration in soft goods industry 2261
weaving. control of variables which influence quality 5870
WestPoint Pepperell bids for J.P. Stevens 3095 3887
WestPoint Pepperell's latest offer for J.P. Stevens. possible sell off of bath and sheet business 3114
wool. capacity and operation of wool dumping facilities in Sydney 7289
working environments for employees improved by an effective manager 7864

MANMADE FIBER EXTRUSION (SEE ALSO OTHER HEADINGS, SUCH AS NONWOVEN FABRIC MANUFACTURE AND UNDER SUBJECT HEADINGS OF SPECIFIC FIBERS)

acrylic fiber manufacturing developments 42
acrylic fiber manufacturing, properties, end uses, international and Indian technology 6491
acrylic fibers 4025
acrylic polymers. effects of wet and dry spinning on pore size and volume (Abstract) 8059
aerodynamics of the quench duct. theory and practice 3919
aging phenomena correlated to temperature during extrusion 7343
aluminum sulfate content of precipitation bath at high modulus viscose. effect on fiber properties 3264
ammonia content. effect of stability of cellulose cuprammonium complex in spinning solution 52
Anilana polyacrylonitrile, Chemitex-Anilana from Poland, production, types, uses 4035
aromatic polyamide-imide. high modulus fibers and films 5711
aromatic polyamides spinning techniques 5651
Barmag. spin-drawing, texturing, and winding machinery 5666
batch polymer dissolution processes. calculation algorithm 7324
Bayer adds dimethylformamide to polyacrylonitrile to produce antimicrobial fiber 5631
block spinneret assemblies with increased number of holes 3265
Buehler. processing of polyester granules and polyamides 5682
Celica cellulosic fiber from cellulose urea reaction, by Neste 3244
Celica fibers from Neste. production and properties 4039
cellulose fibers from dimethylacetamide with lithium chloride polyacrylonitrile 4041
cellulose. lithium chloride/urea processing system 4054
ceramic fiber from oxynitride glass from Shimadzu 2460
ceramic fibers with cyanosilicate groups from inorganic precursors (Abstract) 8060
Clemson conference on in-house extrusion of synthetic fibers. use in compact spinning systems 2464
cold drawing of polymeric fibers and films. rheology 7293
complex yarn spinning. process control by points of light reflection 7325
continuous, batch, and semi-continuous polymerization and spinning processes 8118
conventional and compact lines. fiber production. web bonding of thermobonded nonwovens 53
copolymer of acrylonitrile and sodium methalylsulfonate, sulfonic acid groups 4843
copolymers of rigid and flexible macromolecules, process 3298
core shell type fibers. spinning parameters and viscoelastic properties 7300
cross-section modified results in improved fiber properties 6519
deformation equations, solvent changes during extrusion 4844
dimethylacetamide solutions of polyamic acid polymers extruded. wet spinning 7326
Dorsett Carpet Mills. carpets made with own solution dyed nylon products 2453
drawing process optimization for polypropylene and polypropylene

blends 910
Eastern Europe, current activities 3999
electrostatic. polyurethane vascular prosthesis tubes 5990
extrusion polymer coloring concentrates, quality pigments and dyes 3266
fiber extrusion from graft copolymers of polyvinyl alcohol and acrylonitrile 8061
Fibersorb from ARCO. Du Pont to begin production [1989] 8057
flat filament yarns. orientation and crystallinity 4026
Fleissner compact lines for production of manmade fibers for nonwovens industry 8058
Fleissner machinery for manmade fiber production 6508
fluoroplastic fibers. manganese dioxide dispersions in formaldehyde with surface active agents 8062
gaseous discharges from manufacture of polyacrylonitrile fibers, cleaning up waste gases 4840
gel spinning extended chain polyethylene yarns 4059
gel spinning fibers from ultra-high molecular weight polymers 5665
gel spinning produces Tencel cellulosic fiber from Courtaulds 4835
HDPE/PET. orientation stretching 8023
high modulus fibers. production techniques 1662
high modulus viscose. determination of sulfuric acid in precipitation bath 3810
highly concentrated viscose yarn. structural properties 7328
highly concentrated viscose yarns. effect of precipitation bath on primary swelling 7327
hollow fibers. application of substituted polyacetylenes to semipermeable membranes 2471
ITMA [1987]. manmade fiber production and processing 887
ITMA [1987]. manmade fiber production equipment highlights 802
Labspin small scale melt spinner from Extrusion Systems. bought by Man-Made Textile Research Association 4842
latest spinning machines. spinning line and its components, automation 3346
lead content in viscose precipitation baths, polarographic determination 5450
liquid media mixers. efficiency evaluation 8063
lyotropic polymer systems. rigidity and orientation 6542
management of a small polypropylene plant, guidelines. FOY and BCF processes 2465
manmade fiber extrusion meltblown nonwoven fabrics 1054
melt blowing polypropylene. effects of pigments 5667
melt blowing Exxon process. fabric properties and applications 6061
melt blowing. Biax system 5670
melt blowing. ethylene copolymer resins 5668
melt blowing. polyolefin 5669
melt extrusion of polyamide and polyester yarns 4027
melt or solution spun fibers with high molecular weight and strength 4066
melt spinning and quench duct optimization. auxiliary parameters 5634
melt spinning chambers. design trends. air blow devices. feed mechanisms 1663
melt spinning of petroleum mesophase pitch 6509
melt spinning polyester. improvement of properties for better tire cord (Abstract) 8065
melt spun fibers. plants. ITMA [1987] exhibition 6501
melt spun filaments. air quench chimneys 8064
mesh spinneret spinning technology. Teijin 5689
mesh spinneret spinning. new Teijin technology used in manufacture of nonwovens 8066
monofilament yarns by filament separation technique 7358
monofilaments. technology and applications 8083
multifilament spinning. calculating flow characteristics 3347
nematic liquid crystalline fiber. highly oriented fiber without drawing 6510
Neumag. new spinning and processing lines 5756
Newtonian and viscoelastic fluids. fiber orientation related to velocity field 4870
nylon 12 properties compared to nylon 6 and nylon 66 during high speed takeup 8047
nylon 6 preparation German research 7363
partially-oriented yarn extrusion to produce polypropylene filament yarns 8067
PEEK fibers, effects of take-up speed, drawing, and heat treatment on structure 882
PEEK. melt-spinning. structure and properties of resulting fibers 3263
PET modified with PBT. sequential melt-blending and spinning 4053
PET. necking behavior during high speed spinning 1661
petroleum mesophase pitch. melt spinning study 1664
pigmented polypropylene filaments, structures and properties 4060
PM polyamido acid. aging of concentrated spinning 3296
poly(4,4'-terephthanilide) alkylamide fibers. mechanical properties 86
poly(p-phenylene benzobisthiazole) fibers. synthesis, structure, and properties 4067
poly-urea fibers. polymerization. properties. end uses 7336
polyarylates from hydroquinones. Young's modulus values 8068
polycaproamide yarns. method of analyzing extruding process. uniform diameter yarn 54
polyester fiber development in Pakistan. partially oriented, draw-textured yarn production developments 8069
polyester fibers, quick spun. influence of spinning speed during false twist crimping 4030
polyester. high and low speed extrusion, relation of amorphous and crystalline areas 8109
polyesters. color addition in polymerization. dyeing before extrusion 7346
polyethylene glycol as viscose regeneration retardant. influence of molecular weight 8070
polyethylene terephthalate and nylon. chain extension in extruder 3840
polyethylene terephthalate fractionation. polymerization and spinnability 8120
polyethylene terephthalate. flow behavior and spinning conditions 908
polyethylene, extended chain. gel-spinning techniques (Abstract) 8121
polymer jet temperature and viscosity changes along spinning zone length 7329
polymer to sliver by ECOSPUN process from Didier Engineering 888
polymer-solvent interaction in cellulose-N-methyl morpholine-N-oxide water 55
polymeric transporting cylinders for manufacture of viscose textile yarn 8071
polyphenylene terephthalate. dry jet wet-spinning 7357
polyphenylene terephthalate. optimal extrusion conditions 5650
polypropylene fiber breakage 5699
polypropylene fiber extrusion plant management 3869
polypropylene fiber production. processes and machines by Barmag 73
polypropylene filament yarn. high speed spinning 4921
polypropylene filament yarn. Neumag processes 8175
polypropylene staple and continuous filament yarns. manufacturing process and machinery 889
polypropylene, multifilament. cross section technique 8072
polyquinolines, preparation and properties 4882
polyvinyl chloride. extrusion solution effects on preparation process 8073
power regenerated from motors during extrusion process 8074
preoriented polyester yarns, structure and dyeing 4028
processing high molecular weight, flexible-chain polymers (Abstract) 8123
production technology seen at ITMA [1987] reviewed. filament yarn manufacture 944
property anisotropy. planning for special-purpose fibers (Abstract) 8124
quench duct aerodynamics, retains advantages at low and high air pressure 4031
radial air quenching systems, principles and operations 6511

research, present and future. textile science and engineering 6029
rigid and flexible nylon polymers, porosity variation 4883
saponification bath for acetate fibers. determination of iron content 3811
segmented polyester/urethane polymerization. exchange reactions 8125
silk-like polyester fibers. production methods 3267
solvent recovery systems. distillation process. guidelines. problems 6512
spandex fibers. commercial production methods 3309
spandex fibers. review of polymerization and extrusion methods, effect on fiber properties (Abstract) 8075
spandex. production, structure, properties, and end uses 4043
spin finishes. function. composition. development 1665
spin-dyeing of polyester and polypropylene using polymer-soluble dyestuff. advantages. process engineering criteria 7596
spinneret channel, pressure drop. comparison of theoretical and experimental data 56
spinnerets. Groebzig 4029
spinning machinery developments. electronic process control. automation 1666
spunbonding technology 8076
staple fiber processes, update 890
structural-rheological characteristics of polymer solutions 3306
surface antistatic treatment of polyamide yarns 4831
textile production in 20th century (Conf. Paper) 8963
ultra-high molecular weight polyethylene. entanglement of chains. relationship between memory and molecular weight 5717
ultrahigh molecular weight polyethylene. coextrusion drawing increases ductility 7342
ultrahigh-speed. comparison of polybutylene and polyethylene terephthalates 8111
Uniflo U-501 from Vetrotex. manufacture of pultruded products 6741
unoriented monofilament diameter nonuniformity effects on stretch ratio and strength of final fiber 7337
viscoelastic flow through T-shaped junction. velocity measurement 8127
viscoelastic liquid. isometric nonsteady flow in spinneret capillary 4886
viscose film spinning into sulfuric acid precipitation baths. decomposition of cellulose xanthate 4845
viscose gel particle content. FS-112 analyzer 5449
viscose manufacture. plasticizing bath corrosive activity. effect of temperature and bath composition 3268
viscose. double strand extrusion scheme 8077
wastes, polyvinyl chloride, spinning methods 4024
wet and air-gap wet spinning, new chemical treatment methods 68
wet spinning process for cellulose linters. alkalization of cellulose 3269
wood pulp properties. effect on viscose process and fiber characteristics 3313
yarn spun from sulfuric acid solution of a mixture of polycaproamide and polyaminobenzimidazole 4846

MANMADE FIBER FABRICS, SEE FABRICS AND UNDER SUBJECT HEADINGS OF SPECIFIC FIBERS.

MANMADE FIBER INDUSTRY (SEE ALSO OTHER HEADINGS, SUCH AS TEXTILE TRADE)

aerospace market in United States attracts polyacrylonitrile producers 5655
Allied Fibers, industrial fibers, home furnishings, apparel fiber divisions. sales and new products 5
Amoco Fabrics' products profiled 6
Avtex Fibers rayon, synthetic fiber producer closing 8790
Avtex Fibers. no profits threaten closure 8785
BASF products and sales profiled. special product development 7
booming due to new markets, consumer demand. new products 6513
British manmade fiber industry declining, especially acrylics. executives say why 4848
British. declining sales [1988]. increased imports, market outlook for rest of year 4847
Celanese Industrial Fibers quality control program 6363
ceramic. Rath's new Moenchengladbach plant 5638
China to boost production of chemical fibers and linen fabrics. new facilities 6413
China's new production facilities. state of import market for manmade and natural fibers 4849
China's plans to become second largest world producer of manmade fibers. foreign market influence and domestic expansion projects 891
China's plans to increase production 3154
China. recent increase in manmade fiber production, distribution, and growth profiles 4055
Chinese manmade fiber industry, production facilities and goals 4850
Courtaulds North America Incorporated. sales and product development 8
Courtaulds restructures high performance fiber divisions 7942
current world textile environment. shifts in production from developed to developing countries, retaliation 7943
demand for United States high performance fibers. expected growth 1668
directory [1987] United States manmade fiber producers. cellulosic, noncellulosic, olefin, glass fiber manufacturers 58
domestic [1987] manmade fiber shipments increased by six percent, polyester, rayon, and acrylic staple 894
Drake Fibers profile. extension includes new plant 7268
Du Pont supporting Dacron, nylon and Lycra expansion 6177
East Germany. aluminum silicate fibers and substitution for asbestos 5677
Eastern Europe, current activities 3999
Eastman Chemical Products' Textile Fiber Division, management philosophy, products, sales, product development 9
economic trends. developments in United States polyester production 68
European Community's manmade fiber market [through 1990]. polyesters and polypropylene increase, natural fibers decrease 57
European producers await decision on dumping of imported polyester 4851
executives from major manmade fiber companies describe [1988] fiber outlook 895
fiber consumption up in United States, per capita [1987] figures 5601
Fiber Industries acquires Fortrel trademark and Celanese plants 1660
filament fibers in Poland, natural and manmade, trends toward natural fibers 4002
Fischer. polymer and manmade fiber plants 5718
FTC's approval of Celanese's polyester concern to Sterling. merger details, future company plans 2252
future outlook [1990's] at Financial Times International Conference 699
global data [1987]. new records set for production 2467
Hoechst. manmade fibers for technical applications 4841
import-export balance, for [1987] and preceding seven years 8945
India. effect of rising manufacturing costs for nylon 2403
India. polyester filament yarn production 7267
India. problems and prospects 805
India. synthetic fiber production outlook (to 1993) 7974
India 4852
industrial fabrics. new glass, polyamide, aramid, and ceramic fabric innovations by Angst & Pfister 4363
Ireland. future prospects. optimistic outlook. potential problems 7858
ITMA [1987]. machinery for synthetic fiber and yarn production 3270
Japan [1984-1986] review 8078
Japan's major manmade fiber producers, improved profits 893
Japan. curtailed production of synthetic fiber manufacturers 2466
Japanese manmade fiber industry, effect of strong yen and rising

imports 4853
Japanese synthetic fiber producers. industry problems, major producers' market strategies and future programs 3132
Korea, new moves to keep competitive 5626
M-MF Producers changed name to American Fiber Manufacturers. new chairman heads association 8962
manufacturing in developing nations 7983
marketing nonwovens. finding new niches 3102
markets fragment within industry. specialization of component industries 3271
melt spun fibers. plants for extruding, drawing and winding 6501
mill consumption of apparel class and carpet class raw wool and manmade fibers surveyed by Census Bureau. [1987] showing increases 4021
nickel cations in wastewater from manufacture of electrically conducting fibers. ion-exchange method of purification 5557
Pakistan polyester fiber industry 8944
People's Republic of China. second largest world manmade fiber producer by [2000]. effect on domestic and foreign markets projected 892
phenolic. Philene fiber. new production plant 5639
plants for the production of manmade fibers by Noy Engineering. automation 6514
polyamides, discovery and development of history 5681
polyamides. worldwide production, applications, and history 5680
polyester's market position in world 8114
polyester. world outlook. influential factors 806
preliminary release of report on high performance fibers, anticipated domestic demand and fiber pricing [by 1992] 3277
prices rise for manmade fibers in home furnishings industry 2468
producers look forward to a strong year for manmade fiber industry 4855
producers say outlook good for manmade fibers [1988]. market analysis 6515
quality control. industrial practice reveals many deviations from ideal testing and specification standards 4032
rayon grade dissolving pulp, processing 8079
review, analysis. production, cellulosics, asbestos, nylon-aramids, graphite, polyolefin, organic polymeric fibers 804
small fiber extrusion plant 8768
solution dyed yarns. background and new market successes 6533
statistics on synthetic fiber and yarn production and trade in India 7975
synthetic and new technical fibers, industrial applications 5685
synthetic fiber innovations. exhibits at Techtextil 4786
synthetic fibers by Hoechst. new markets and product growth 4057
Taiwan's manmade fiber industry [1987-1988]. production problems and figures 1667
technology. examined for production, processing, end uses 8939
Teijin. history, product line, research, and management 4854
terminology standardized for Polish chemical fiber industry 4856
Texmet metalized fiber 5636
transport automation by Uhde in a filament yarn plant. objectives and solutions 7133
United Kingdom 5671
United States [1987] mill consumption, imports and exports, domestic consumption of natural and manmade fiber 3201
United States [1987] textile and apparel trade deficit 2367
warp knitting productivity and flexibility 8299
West Germany, postwar textile developments. VTCC fortieth birthday 6419
West Germany. breakdown of fiber production figures. foreign trade trends 7330
Western Europe, current activities 3312
Western European viscose fiber producers. types of viscose rayon produced 5720
worldwide production [1987] 5640
Yugoslavia. current, projected polyacrylonitrile production capacity 7949

MANMADE FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS ACETATE FIBERS, ACRYLIC FIBERS, ANIDEX FIBERS, ARAMID FIBERS, BICOMPONENT FIBERS, BLENDS, CARBON FIBERS, CELLULOSE FIBERS, DELUSTERING, EPITROPIC FIBERS, FLUOROCARBON FIBERS, GRAFTING, HIGH MODULUS FIBERS, INORGANIC FIBERS, METALLIC FIBERS, MODACRYLIC FIBERS, NOVOLOID FIBERS, NYLON FIBERS, NYTRIL FIBERS, OLEFIN FIBERS, OPTICAL FIBERS, POLYESTER FIBERS, PROTEIN FIBERS, SPANDEX FIBERS, SPLIT FIBERS/SLIT FILMS, VINAL FIBERS, VINYON FIBERS, VISCOSE FIBERS, YARN PROCESSING AND UNDER SUBJECT HEADINGS OF SPECIFIC PROCESSES)

absorbent characteristics of nonwovens. fluids 6076
ACHEMA [1988]. plant design and machinery for manmade fiber production 8747
acrylonitrile and 5-vinyl-2-methyl pyridine. modified chemisorptive fibers 8042
alkalies and effects on geotextiles 6771
Allied Signal develops high performance fiber called Spectra for sports equipment 5627
American Sun's Vivrelle polyoxamide comfort fiber 5672
anisotropic polymeric fibers. refractive index distribution 897
antistatic properties in apparel-grade polymers 3272
available to nonwovens roll goods manufacturers. buyers' guide 6518
bamboo and polymer geogrids. shear behavior testing 6772
BASF Fibers Division's commitment to rayon. future plans outlined 696
Belima X. ultra-fine polyester/nylon microfiber from Kanebo 6516
Bulgarian polyester and polypropylene geotextiles. properties and uses 4352
buyer's guide for management services, supplies, and equipment 898
calcium hydroxyapatite fiber for synthetic biological implants 8132
Celanese PBI. properties and uses 5603
chemical pulp fibers. changes during recycling 62
chemical structure and properties 4063
civil engineering. nonwovens. applications for Pegaso's PEGEO 4364
closed-cell foam fibers from Allied 5628
composite fibers based on flexible-chain polymers. limiting value of elastic modulus 3273
consumption worldwide of cotton, wool, manmade, cellulose fibers since [1960] 4001
copper sulfide-containing bemberg fiber from Asahi, electrically conductive and antibacterial properties 5678
cotton content (high) fabrics from core yarns containing high tenacity manmade fibers 7391
cross-section modified results in improved fiber properties 6519
definitions of fibers and nonwovens production processes 5688
determination techniques for modern manmade fibers 7060
developments since [1980], international products 4859
developments, chemistry's role 1545
Dilasoft KLP Liquid concentrate. softener from Sandoz for cellulosic and manmade fibers and their blends 5158
directory specialty and high performance fibers 5629
drainage geotextiles. comparison of needle punched or spunbonded synthetics, virgin synthetics or recycled fibers 6774
Drake expands facilities to manufacture Leolene for industrial textiles 5673
Du Pont supporting Dacron, nylon and Lycra expansion 6177
effects of polymer characteristics in geotextile soil reinforcement 7527
elastane fibers, thermomechanical properties studied to control elasticity 4044
encapsulate or immobilize cells, enzymes, and other biological materials. production process for materials to filament 3964
Europe. new fibers. trends. high performance fibers. biologically active materials 6517
evaluation of geotextile characteristics for drainage layer suitability 6775
exchange for Austrian superhighway. manmade fiber fleece as substrate 7759
fallacies about effect of synthetic fibers on skin 3274

fiber and polymer relation to biotechnology 82
fiber forming polymers. characteristics 3301
fiber profiling in forming maximally reinforced organic resin fiber composites 7333
Fiber S. new comfort fiber from Snia Fibre. properties 4892
filament fibers in Poland, natural and manmade, trends toward natural fibers 4002
flame retardant fibers. Snia Fiber's Velicren FR. production methods 6505
Fleissner compact lines for production of manmade fibers for nonwovens industry 8058
fluorine-containing copolymer based fibers. physicomechanical properties 7334
future. developments. textile science and engineering 6029
Genesis process for solvent spun cellulosic fibers. use of fibers in thermal and latex bonded nonwovens 59
geotextiles, review of new applications 2619
geotextiles. applications in India 8668
geotextiles. creep and relaxation behavior data challenged 6777
geotextiles. history, growth, applications 7790
Grade R4 shearing blades from Schlenter 5535
high molecular sulfite cellulose. ionizing radiation effects 8029
high performance fibers. processing, structure, properties, and end uses 4048
high pressure liquid jet cutting of polymers. tests and parameters 6980
high temperature alumina/ceramic fibers from Carborundum resistant materials 3275
high tenacity. Karl Mayer develops ZM(Z)G warping system 8244
highly modified copolymers. possible applications 7313
highway approach embankments. geotextiles and reduction of lateral stress 6783
Hoechst introduces new Trevira and Dolan carpet yarns 3795
Hoechst. manmade fibers for technical applications 4841
hollow fibers. application of substituted polyacetylenes to semipermeable membranes 2471
hollow fibers. temperature adaptable. patent application and insulation properties 7335
ICI Fibers' 24 Tactel Carat fabrics, weavers chosen to manufacture fabrics. fiber properties 60
incontinence pad coverstocks and effects on patients' skin. softness and hand of different coverstock materials 7745
INDEX [1987] Congress papers. viscose fibers, solvent spun cellulosic fibers, thermobonding, resins 61
India 4852
industry trends. changes forecast for the year [2000]. production shifts to developing countries 6411
ion-exchange fibers, bonding, sorption of insulin molecules, tests 5679
itaconic acid used as comonomer in acrylic fiber. carbon fiber precursor 8081
Japanese companies produce fabrics for skiing 6804
Japanese technology and competitive strategy in world market 7104
jute and synthetic fiber properties compared 4821
knitting. conference papers 5913
laser radiation action on fibers. basic stages and threshold characteristics 7361
limited-use protective clothing. fabrics. construction 4622
list of manmade fibers. fiber type, manufacturer 6520
Lycra. Du Pont's expansion plans 4857
macromolecular chemistry, affect on textile industry, development of polymers 4065
manmade fiber yarns, development tendencies 4970
manmade staple fiber shipment figures [1987]. percentages to nonwoven roll goods producers 6521
manufacturing in developing nations 7983
market outlook [1988]. fiber industry executives predict good year 895
markets fragment within industry. specialization of component industries 3271
melt blown. Biax system 5670
Metap knit-weaving. special purpose fabrics with synthetic fibers 4297
microglass from Bayer 8053
mineral fibers. manufacture of amorphous, polycrystalline, monocrystalline forms 8082
monofilament and film fibers. overview 8050
monofilaments. technology and applications 8083
Neumag. new spinning and processing lines 5758
Newtonian and viscoelastic fluids. fiber orientation related to velocity field 4870
Nitril-Static carpet fibers, reduce static electricity, test results 4037
nonwovens applications. standard and special grades, properties 1891
nonwovens industry. fusion bonding. special fiber production 355
nonwovens industry. [1988] buyers' guide 6619
nylon 6, viscose, and polyester knit fabrics for footwear linings 6043
PABI. polyelectrolyte swelling 4858
PABI/CPAN. structure and properties 7299
PBZT fibers. mechanical properties. advantages, applications. composite properties 4871
Perrustol Ave. nonionic antistat from Rudolf for wool and manmade fibers 5175
petrochemical industry history 3276
phenolic. Philene fiber. new production plant 5639
Philene. flame resistant phenolic fiber 2470
Philene. phenolic fiber which is permanently flame-resistant 8080
poly(alpha-amino acid) fibers. enzymatic degradation 70
poly(L-glutamic acid) fibers. biodegradation behaviors 69
poly-urea fibers. polymerization. properties. end uses 7336
polyacrylonitrile fiber. retention of antistatic properties after boiling washes. reasons 63
polychlal flame retardant synthetic fiber. Cordelan from Kohjin 8084
polyester, polyamide granules, processing. Buehler 5682
polyester, polyethylene and polypropylene geotextiles in reinforcements for bridge embankment project 7766
polyester. flame retardancy through polymethacrylic acid 6523
polyether ketones, aromatic. properties and applications 5683
polyetherketone fibers. properties and applications 8085
polymer science research and development 6499
polyoxamide. Vivrelle from Snia Fibre 8086
PPTA fiber modified via ultrasonics. mechanical properties 7538
preliminary release of report on high performance fibers, anticipated domestic demand and fiber pricing [by 1992] 3277
prices rise for manmade fibers in home furnishings industry 2468
Primaloft. insulating material 5674
production machinery exhibited at ITMA [1987] in Paris 900
properties of manmade fibers and their effective use in nonwoven industry 3278
properties, formulations, and brand names of fibers for industrial and technical products 7539
property changes under action of epoxy resins 3391
raschel knit curtains. product evolution from new techniques and finer synthetic yarns 4259
Rhone-Poulenc fiber activities 2404
RPP-1, recycled material with high recovered polypropylene content. web formation 1060
sales [1987]. high sales for chemical fiber producers. trends in knits and stretch products 4056
semi-flexible liquid crystal polyesters melt spun into highly oriented fibers 65
SNIA Fibre monofilament products at Techtextil 4045
soft clay stabilization. geotextile support of berms 6784
spider silk, gene holds secret to high tensile fiber. PA Technology team investigates 6524
spin finishes. friction reduction. antistatic agents. stabilizing agent 7319
spin finishing. static control of manmade fibers. finishing agents 6504
Spring Industries' new Ultrasuede fabrics 2688
Steen, Schwarzenbek's Saff superabsorbent polysodiumacrylate flock used in hygienic nonwovens, properties 1716

synthetic and natural fibers compared. future prospects. world-wide situation applications, demands 1601
synthetic and new technical fibers, industrial applications 5685
synthetic fiber production outlook for India 7974
synthetic fibers by Hoechst. new markets and product growth 4057
synthetic fibers. structure and function 3279
synthetic poly(alpha-amino acid) fibers. enzymatic degradation 2472
synthetic yarn deformation process. statistical modeling 3822
Tactel 24 Carat hi-tech fiber from ICI Fibers. for high quality sports and leisurewear 896
Techtextil Trade Fair, Frankfurt, technical fabrics, fibers 6421
Teijin. history, product line, research, and management 4854
terminology standardized for Polish chemical fiber industry 4856
terminology. standard definitions, sixteenth installment 66
Texmet metalized fiber 5636
thermoanalysis of geosynthetics 7535
thermobonding fibers, PA and PES, from EMS-Grilon. mechanism and advantages 67
third generation. synthetic silk fibers. advanced technology 2473
Toray develops superfine filament for lens cleaner 6531
toxicological testing, standards, methods, classification 4657
unoriented monofilament diameter nonuniformity effects on stretch ratio and strength of final fiber 7337
Vivrelle, polyoxamide fiber from Snia. specifications 913
Vivrelle. polyoxamide fiber for use in nonwoven apparel 1643
Wacker MP for thermobonded nonwovens 5676
warping high tenacity yarns. Mayer's ZM(Z)G warping system 5852
wet and air-gap wet spinning, new chemical treatment methods 68
worldwide production [1987]. geographical breakdown in production [1975-1987] 4861
worldwide production [1987] 5640
yarn stretching and heat setting. heating of synthetic yarns 3382

MANMADE FIBER TESTING, SEE BLEND TESTING, CHEMICAL TESTING, FIBER TESTING, AND UNDER SUBJECT HEADINGS OF SPECIFIC FIBERS.

MANMADE FIBER YARN, SEE YARN PROCESSING--FILAMENT YARNS, YARNS, AND UNDER SUBJECT HEADINGS OF SPECIFIC FIBERS.

MANMADE HIGH TEMPERATURE FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS INORGANIC FIBERS, NOVOLOID FIBERS, AND UNDER HEADINGS OF SPECIFIC GENERIC CLASSES OF FIBERS)
aluminum silicate fibers and substitution for asbestos 5677
aramid heat resistant materials for fireproof clothing from Teijin 6031
aromatic polyamide and polyamide-imide. synthesis and characterization 914
carbon fibers. dimensionally critical structures for spacecraft and electronics packaging. new fibers 7306
Celanese Industrial Fibers' PEEK filament for use in thermoplastic composites 3295
composites, high temperature. spacecraft applications project at North Carolina State 8372
composites. surface reactions on high performance fibers studied with Fourier transform infrared spectroscopy 7338
Europe. new fibers. trends. high performance fibers. biologically active materials 6517
finishes and fireproof fibers compared for performance and cost 6032
fire resistant polyacrylonitrile fiber and fabric 7354
high performance polymer matrix composites. deterioration in aerospace environments 7500
high temperature alumina/ceramic fibers from Carborundum resistant materials 3275
Hoechst Celanese PBI. flameproofing characteristics 5686
Kermel from Rhone-Poulenc. synthesis and properties 4832
PBZT fibers. mechanical properties. advantages, applications. composite properties 4871
PPS, PEEK, PEI fibers from Teijin 8088
superconducting, high temperature fibers from organometallic precursors 8055
synthetic and new technical fibers, industrial applications 5685
Teijin's three super fibers using PPS, PEEK, and PEI base resins 5710
thermoplastic matrix of polyether ketone ketone in carbon fiber reinforced composites. evaluation 7508

MANUFACTURING, SEE UNDER SPECIFIC SUBJECT HEADINGS.

MARIED IS A HIGH MODULUS FIBER.

MARKETING (SEE ALSO OTHER HEADINGS, SUCH AS COTTON MARKETING, FASHION, INTERFIBER COMPETITION, RETAILING, TEXTILE TRADE, WOOL MARKETING)
additives. market growth forecast in Europe due to increased demand for natural fibers 6809
adult incontinence pads 1363
adult incontinent products and their market 2959
adult incontinent products, refinements, market expansion 2960
Allied Fibers' promotional campaign for new Patina nylon. application in intimate apparel 3281
alternative window covering market [1988]. highlights, market offerings 2184
AMTEC export cooperative for small-sized and medium-sized mills 8946
Anne Klein II sportswear line. targeting niche consumer and promoting line 1384
apparel fixtures to grab consumer attention 2982
apparel industry, United States. sourcing alternatives reevaluated. new attitude for onshore production 5565
apparel manufacturers. new strategies in management and technology 1496
apparel, children's. consumer attitudes and industry responses 603
apparel. Vivian Chan Shaw's unusual distribution markets 5422
Aristoc, hosiery firm, achieves British Standard for quality control. uses registration to aid management and promote product 7121
Australian goat fibers. status of crossbred grades 6470
auto and apparel. German warp knitting industry and velour fabrics 7432
Avtex, largest rayon producer, closes 8789
Awnlit. illuminated awning developed by Duracote 8667
Bear Brand hosiery and company image restyling 7022
bedding. duvets, great increase in consumer demand 3019
Bloomingdale's and International Wool Secretariat produce commercials focusing on wool apparel 1492
Brazil. international expansion markets 3158
cable television home shopping programs for apparel 5429
Canadian carpet market assessed after stock market crash. Du Pont Canada 3000
carpet industry United Kingdom 8659
carpet industry. United Kingdom. woven and nonwoven 2816
carpets, high end wool. Helios division of Horizon Industries strategies 4510
Chilean angora rabbit hair. European buyers 5613
Chinese. six new policies being considered to improve the manufacturing and marketing of textiles and apparel 3154
computers critical to second generation marketing plans 1478
consumer satisfaction with textile purchases. post-purchase attitude study 7967
cotton industry. computer controlled planning and marketing 3915
Courtaulds Hosiery changes name to Aristoc. introduces new brands 4615
creativity in manufacturing technology, marketing, and product development to increase competitiveness 1489
curtains of woven fabrics in European markets 8663
Dan River's niche marketing strategy, upscale designer licenses, collections 6255
Daniel Hechter Company profiled. product diversification 1493
Dawson International. history and current status as U.K. knitwear company 3089

designing products for specific markets and uses 1490
designing products to fill market niches 1583
diapers. private labels versus national brands 1357
dispersion retailing. market segmentation on global scale 1278
disposable superabsorbent products in Europe 1362
draperies. Burlington's Quick-Turn plan 8672
Du Pont management decided on name for nylon based on marketing considerations 5693
electronic shopping, retailer urged to use caution 5428
England. trade and retail stocks after holidays 2976
European carpet sales boosted by fiber producers' new high tech fibers and promotional activities 4641
fashion and profit at TAFE [1988] 8588
fashion trends. using trends to plan marketing strategies 1276
FASLINC and Quick Response, fabric suppliers linkage council activities 2263
feminine hygiene products, demographic trends 2991
Fiber Industries. polyester 3107
film tapes and monofilaments 8049
flame retardant, pigmented modacrylic fibers 480
flannel sheets, leveling off of market 2190
footwear. United States market trends 1307
garment dyeing 7608
garment fit and consumer attitudes 3772
garment industry strategies in terms of quality. needs and misconceptions 7123
Germany. survey of consumption patterns, price versus quality 7934
Girbaud North America. apparel marketing and retail merchandising business 3779
glass fiber composites [1986] for Germany and Europe reveals strong growth 3874
global industrial strategies for product design and marketing 1491
Hartwell's junior sportswear divisions. management and marketing strategies 2964
Hoechst introduces new Trevira and Dolan carpet yarns 3795
Hoechst. manmade fibers for technical applications 4841
Home Fashions Marketing to offer window coverings and other home furnishing products from Far East 3083
home fashions [1988] buyer's guide lists suppliers and products 2188
home furnishings color predictions [1989] from Color Marketing Group 3021
home furnishings industry. product diversification's effect 4706
hosiery market. Lycra and cotton dominate, reasons why 1381
hosiery trends [1988]. design, fabric, color 1373
HVI grading for cotton marketing 8679
industrial fabrics in United States 5140
industrial fabrics, United States. shift toward specialization and small market niches 2673
industrial fabrics. growth predicted for United States market 3404
industrial fabrics. niche marketing in the United States 1127
industrial fabrics. niches due to technical advances 1433
Institute of Industrial Launderer's Market Development Plan. mission and strategy 2262
interior design and product display in stores. attracting customers 1498
International Mohair Association. quality standards to determine market value 6471
International Wool Secretariat. promotion of wool jersey 1494
introducing new products. timing critical to sales 1277
Italian market for mohair, cashmere, angora, alpaca 6472
jeans sales soft in spite of fashion finishes 1383
Jonbil company profile. Long Haul jeans. marketing strategies 5404
jute. world market prices and supply 2424
K-Mart home furnishings division. Martha Stewart signed on as new spokesperson 648
Krizia, market position in United States apparel retail market. company strategies. foreign licensing 1992
laundering. advertising kit for industrial launderers, study. materials, test project, effectiveness 7711
Lavant by Sister Fisher. cleanser for fine linens 2067
Lee Company profile. Lee Global Image junior denim line. twenty-five million dollar advertisement campaign 7018
lingerie. licensing agreement between Valentino and Warnaco 2104
Lynn Johnson. textile designer specializing in home furnishings 3015
Malaysia. prospects for international expansion 3170
men's tailored clothing. United States trends 1328
Mensley Group Limited. product development for knitwear company 3884
Mintel report on teenage consumer, attitudes toward clothes. advice to capture market 6236
Mossley Incorporated, novelty yarn producer. quick response strategy 4149
multiaxial fabrics 5110
MWG Apparel. Canadian shirt manufacture. highly automated production system using Gerber and Eton machinery 2130
net curtains 5447
network distribution in India 8958
nonwoven floppy disk liners 1423
nonwoven for wound dressings 4273
nonwovens industry. developing new markets 3102
nonwovens 6341
nylon fiber for carpet industry. recent improvements in the fibers. Du Pont plans 7340
Odermark, apparel manufacturers. part of West German F. W. Brinkmann. strategies 2814
Pretendables, children's wear line from Presentables Cinzia 2884
private label merchandising and the knitting industry. markets and effects on operation of knit manufacturers 4619
Quick Response as marketing tool for fashion industry, acceptance by apparel and textile industry 7669
Quick Response initiative supported by textile, apparel and retail executives 8779
Quick Response strategy analyzed 1990
Quick Response technique at Hanes. success and expansion after eighteen months 8777
relationship of quick response and FAM technique for improved productivity and quality 8778
rental industry markets career wear and laundering service 8755
role of trade representative as disseminator of information between commercial and industrial concerns 3979
sanitary napkins, private label over brands. trends 3036
Shaw Industry targets different market segments with consolidated contract carpet division 3009
sheets. retailing strategies 3026
small business textile production 3100
Sointes automatic rib knitting and bar loading machine for knitwear manufacturers 4245
source materials market for synthetic fibers in Japan. tight supply of materials, plant troubles in Japan 1670
sourcing fashion, global markets, data on exports 1582
Spain, apparel exports. opportunities for Europe 6232
Spanish men's fashion industry. problems compounded by poor showing at Gaudi Hombre 2966
specialty natural fiber market. current status and future prospects 2422
St. Gillian Group. ready-to-wear. expanding sales market, design philosophy, apparel lines, price points 2111
suits, made to measure. merchandising strategies by upscale companies 2924
Sulzer Ruti loom division. marketing, development, service, production concepts 3868
superabsorbent polymers in diapers, sanitary napkins, and tampons 1086
superabsorbent polymers. North American market 2973
sweater market trends at Yarn Fair/SOURCEAmerica [1988] 8229
Tennessee Woolen Mills. blanket collections compete with European designs 3017
Textile Product Design and Marketing conference highlights 1495
trend toward sports/casual men's wear concept in Great Britain 8623
Truetzschler. manufacturer of machinery for preparatory plants

8750
Twin Panda introduces line machine embroidered bed linens and accessories 3018
uniforms. information to help industrial launderers market their product 7715
Unika Vaev profiled. fabrics for office furnishings 1428
United Kingdom and Courtaulds. market oriented strategies replace production oriented strategies 3101
United Kingdom sportswear industry. Puma's activities 2153
United States and developing countries, imbalances between 2366
United States carpet industry 7117
United States made clothing preferred by American consumers, study shows 2950
United States nonwovens market 3103
United States shipments of sheets, towels, and pillowcases 3171
vendor and retail strategies include marketing as key component 7024
vertical integration in soft goods industry 2261
videos hold promise for marketing 4613
wall coverings, West German market. survey of marketing and sales representatives 4644
WestPoint Pepperell's Masterwear carpet cushion. composition, properties, promotional campaign 6247
Wilmark, sales and marketing company for textile machinery and auxiliary parts 3069
women's apparel, large size market. potential of growing category realized by manufacturers, retailers 2120
world consumption of laminates for production of printed circuits used in electronics industry 3881
yarns, textured. for technical, apparel markets 8222

MARKING
"Brand-A-Bale" marking ink for cotton bales from Cotton Incorporated and Stern Chemtech 4812
Bobbin Show [1987]. cutting and marker making/grading equipment highlights 541
chalk type and shapes that do not dry the skin, removed during steaming, and do not require sharpening 4523

MATERIALS HANDLING (SEE ALSO OTHER HEADINGS, SUCH AS FABRIC HANDLING EQUIPMENT, PACKAGING)
accidents, fire and chemical. prevention and fighting concept from Sandoz 5494
apparel manufacturer's materials handling systems 3698
apparel. materials handling costs. computer model for effective strategies 6972
Belgian plant's folding unit with conveyor transport yields more sanitary garments 8845
bobbin conveyor, robot transfer, and pin carriage from Saurer-Allma 5796
bobbin pick-up and transfer handling system 5747
Bobbin Show [1987]. materials handling highlights 550
bobbin transport, driverless 4111
bobbins, condenser. Spoolcreeler automatic transport system 5759
cloth beam handling and transport system. automation. robotics. computer integrated weaving 5027
computer analysis of spinning operations, material flow in worsted mills 8758
computer integrated weaving with cloth beam handling and transport systems from Sulzer Ruti 3920
computerized and automatic materials flow and storage 3141
conveyor feeder for fibers 8164
doffer, type 660 speed frame. Zinser 5725
drying system, TDH high frequency. automatic transport. Thies 5321
French apparel carriers and their trade 2603
garment packing and handling systems from various companies 3699
GM-100 Gerbermover and Ipec's fashion transport system installed at Depict 3692
hot greasy wool. biaxial compression to high densities and subsequent storage 2435
IMB [1988]. highlights 8587
Invesmove flexible production system for apparel manufacturing 4516
ITMA [1987]. auxiliary equipment, transport, testing systems 7178
ITMA [1987]. double twisting, twist texturing, and fixing 4948
Japanese spinners concentrate on winding and combing machinery over spindles and rotors 6595
Jasper material transport for yarn winding and dyeing without personnel 3578
K. Kurz Hessental modular textile storage pallets 3939
Levi's used barcoded labels to shorten retailers' processing time 6175
link bobbin transport system from Hamel 5748
management strategies using logistics for central planning 8773
META-Regelbau's interlocking rational storage shelving concept 3945
modern methods of transportation of textile products. yarns, beams, gray fabrics 3921
modular manufacturing, paper by Mike Brent given to American Apparel Manufacturers Association summarized 3895
Nedlin plant in Rotterdam. work transportation and management approach 4581
Nisshinbo Industries spinning mill, operations and reasons for high efficiency 2517
overhead, automated transportation system for a textile mill, parameters 4732
pneumotransporter, burning fiber waste, prevention, analysis of fire source 5524
polymeric transporting cylinders for manufacture of viscose textile yarn 8071
productivity. production lay-out and materials handling and storage 5520
robot system by Sulzer. applications in automated weaving 5037
robotics for materials transportation in mills 5497
robotics in apparel plants, ShBM-150 device for fabric roll transport 4531
safety guidelines for tolylene diisocyanates. health problems, clinical results 7197
Saurer-Allma TM two-for-one twisting machine with robotic bobbin conveyance and driverless pin carriage transport 6598
Schweiter conveying systems. CON-CO-MAT and RING-CO-MAT 4108
storage, chemical. fire prevention 5495
transport and materials flow accessories from BAKA, Blickle and Wanzl 3927
transport system, Innovatex. sliver cans, rovings, and cones 5724
truck from Contex. Compactlifter for moving warp beams and fabric rolls 4741
unit production systems from Eton Systems. in place example. 2002 MDF system advantages 4548
Vari-Flow overhead rail system for garment handling. unique features. flexibility 4547
winch design for simultaneously emptying more than one jigger during debatching 8837
wool bales. optimizing system through automation and improved stacking patterns 2425

MATHEMATICAL ANALYSIS, SEE UNDER SPECIFIC SUBJECT HEADINGS SUCH AS SIMULATION, STATISTICAL METHODS, TEXTILE CALCULATIONS, TIME STUDY.

MATTRESSES, SEE BATTINGS, FABRIC PRODUCTS, HOME FURNISHINGS.

MEASUREMENT, SEE TEXTILE TESTING AND UNDER SPECIFIC SUBJECT HEADINGS.

MEDICAL PROBLEMS, SEE INDUSTRIAL HEALTH AND SAFETY.

MEDICAL SUPPLIES, SEE SURGICAL PRODUCTS.

MEGALON IS A NYLON 6 FIBER.

MELANA IS AN ACRYLIC FIBER.

MENDING, SEE INSPECTION.

MERAKLON IS AN OLEFIN FIBER.

MERCERIZATION
blends. effects of sodium hydroxide concentration, temperature and equipment on mercerization 7570
cellulose crystallization affected by cotton 4404
cheese 7571
combined mercerization, dyeing method for woven cotton fabrics 4407
combined vat dyeing and mercerization saves electric energy, steam, water 5163
control of chemical concentration 8454
cotton broadcloth. effects on wear life 5304
cotton fabric. neps treated with mercerization and submercerization sodium hydroxide 398
cotton fiber structure and properties. effects of mercerization 6463
cotton. process technology 2727
Dimensa by Benninger. solution to the problems of dimensional stability 8459
Dimensa mercerizing machine from Benninger 1188 3572 3573 5181 5182 8457 8458
Dornier equipment trade literature 2725
fabric mercerizing machines and their operations are reviewed 7572
gamma cellulose content increased in viscose fibers resulted in high reactivity and uniformity 4890
hairiness of open end and ring spun yarns. effects of chemical treatment 3398
history of mercerization. John Mercer's original work to modern experimentation 1910
history. contributions of Mercer and Lowe to technology 1191
ITMA [1987]. innovations in wet processing machinery. application of process control 6821
ITMA [1987]. pretreatment systems 4409
liquid ammonia and caustic soda treatments on jute and cotton. comparisons 6834
liquid ammonia mercerizing as alternative to alkali 3574
liquid ammonia treatment of cotton and cotton blend fabrics. breaking ammonia adduct 6836
mercerizing machines, chainless and padless-chainless 6837
pad-batch, of polyester/cotton fabrics 400
pad-chain mercerizing machine. tenter frame. sodium hydroxide recovery 6838
phase transitions. alkali distribution in alkali cellulose 8460
physical, mechanical, and chemical processes 1911
pilot plant for removing contaminants from spent liquor 7103
process parameters. impact on cotton properties 2726
processes described and evaluated for various fabrics. shrinkage calculation method 1912
slack mercerization of cotton 2728
tubular knits. innovations at ITMA [1987] shown by Dornier 6833
wetting agents, benefits. commercial wetting agents and trade names 4412
yarn mercerization. advantages over fabric mercerization. saveral machines 6839

MERINO, SEE WOOL.

METAL DETECTORS (SEE ALSO OTHER HEADINGS, SUCH AS INSPECTION)
Nowo Card K. Noworoll. with metal detector system 8148

METALLIC FABRICS
aluminum coating of polyethylene terephthalate fabrics, production 5318
apparel drycleaning, common problems 2854
Bakaert's Geo-Fleximat woven steel geotextile. stress distribution features 7522
carding efficiency measured with two scientific methods 4901
conductive fibers used in nonwoven mats. shields against electromagnetic interference 1166
conductive nonwovens. Lantorine fabrics based on aluminum, nickel, copper 8415
fabric types. metallizing methods. markets 1873
foils, stamping, from Leonard Kurz of New Zealand. foils, application process, fabric outlet markets 4420
heat reflective fabric with aluminized face. Reflespace. France 8401
metalized fabrics. techniques and applications 8410
offline finishing technologies for nonwovens. coating. high vacuum metalizing 1042
production and applications for industrial textiles 1146

METALLIC FIBERS
aircraft manufacture. composites edging out metals 3511
alumina fiber reinforced aluminum plates. tensile notch strength and endurance limit 6299
composite bond strength with polymer-impregnated concrete 7826
filter fabrics produced with metallic polyacrylonitrile fibers to eliminate static electricity 321
metalized Nitron fibers. heat treatment and humidity effects on electrical conductivity 7360
mineral fibers. manufacture of amorphous, polycrystalline, monocrystalline forms 8082
Nicalon fiber reinforced aluminum filaments. behavior as function of temperature 901
Nippon Yakin Kogyo's stainless steel fiber. application, properties, price points 2443
Nitril-Static copper/polyacrylonitrile anti-static fiber. production and uses 4036
Nitron. reaction with nickel during chemical metalization 4893
polyethylene melts filled with metal or carbon fibers. rheological properties under steady shear flow 5687
superconducting, high temperature fibers from organometallic precursors 8055
Texmet fibers. Ricem B 83 polyacrylonitrile fiber coated with nickel and copper for antistatic textiles 8089
Texmet. acrylic fiber coated with copper and nickel 7295
Texmet. metallized acrylic fiber developed by Intituto Guido Donegani with applications in nonwovens 2446
Texmet 5636

METALLIC YARNS
circular knitting machines. developments 5934
study of eight museum samples using electron microscopy and energy dispersive x-ray spectrometry 4978

METRICATION (SEE ALSO OTHER HEADINGS, SUCH AS TEXTILE TESTING)
cotton fabrics. ammonia mercerized cellulose for improved physical characteristics 7645

MICROBIOLOGICAL DEGRADATION (SEE ALSO OTHER HEADINGS, SUCH AS ANTIBACTERIAL AGENTS, FUNGICIDES, GERMPROOFING, ROTPROOFING)
animal model exposure to cotton dust 8877
antimicrobials for textiles. preventative benefits and marketing advantages 5997
bacteria and extracellular catabolic enzyme activity. softening of hard root cuttings of jute 828
poly(alpha-amino acid) fibers. enzymatic degradation 70
poly(L-glutamic acid) fibers. biodegradation behaviors 69
synthetic poly(alpha-amino acid) fibers. enzymatic degradation 2472
test methods. application of microbiology in textile industry 1464
wastewater from silk and ramie mill 2318

MICROSCOPY (SEE ALSO OTHER HEADINGS, SUCH AS ELECTRON MICROSCOPY)
asbestos in ambient air determined by microscopy methods 3066
cellulose derivatives. liquid-crystalline properties 4770

composites. boron/aluminum. tensile fracture process observed by scanning electron microscopy 686
contact impregnation method, effect on cotton and cotton blend woven fabrics, microscopic analysis 4489
electron. studies of soiling and soil removal. residual soils 582
electron. used to study surface and fracture morphology of swelling treated silk 27
microanalysis. surface. uses of EDAX analyzer fitted to SEM 3836
microphotometer tests of short segments for evaluation of fiber arrangement of open end spun yarns 4956
neps. microscopic analysis 6473
polarizing microscopy used to study elastic fields in epoxy resin composites 7495
Polish computerized microscope system for fiber diameter measurement 5512
textured yarns, friction. surface alteration examined 6271
yarn defects. structural organization in viscose 8225

MILDEWPROOFING, SEE FUNGICIDES, MICROBIOLOGICAL DEGRADATION, ROTPROOFING.

MILL BUILDINGS (SEE ALSO OTHER HEADINGS, SUCH AS AIR CONDITIONING, AUXILIARY EQUIPMENT, COSTS, ELECTRICAL EQUIPMENT, ENERGY, INDUSTRIAL ENGINEERING, MANAGEMENT, MATERIALS HANDLING, NOISE, POWER CONSUMPTION, QUALITY CONTROL, TEXTILE MACHINERY, TEXTILE MILLS, WASTE TREATMENT--EFFLUENT, ETC.)
melt spinning and quench duct optimization. auxiliary parameters 5634
spark remover, JOSSI FA/S, for plant air conduits 6372

MILLING, SEE FULLING.

MILL MANAGEMENT, SEE MANAGEMENT.

MILLS, SEE APPAREL MANUFACTURING PLANTS, KNITTING AND HOSIERY MILLS, MILL BUILDINGS, TEXTILE MILLS.

MINERAL FIBERS, SEE CARBON FIBERS, INORGANIC FIBERS.

MODACRYLIC FIBERS
Dunova modacrylic fiber in multilayer athletic fabrics 3280
flame retardant, pigmented modacrylic fibers 480
Lufnen from Kanebo. flame resistant. better dyeability 8090
Velicren FR by Snia Fiber. production of flame retardent fibers 6505

MODAL, SEE HIGH MODULUS (RAYON) FIBERS.

MODIFIED FIBERS, SEE CHEMICAL MODIFICATION, FIBERS, TEXTILE NUCLEONICS, AND UNDER SUBJECT HEADINGS OF SPECIFIC FIBERS.

MODMOR IS A CARBON FIBER.

MOHAIR (SEE ALSO OTHER HEADINGS, SUCH AS FURS, HAIR FIBERS, WOOL)
angora blended yarn. blend ratio measurement using density gradient tube 663
Australian goat fibers. status of crossbred grades 6470
diameter unevenness. measurement by ITQT Digital Hairiness Meter 3046
fabric quality. relationship to mechanical properties 7540
fiber scale height used for distinguishing mohair and wool 3044
International Mohair Association. quality standards to determine market value 6471
international mohair production, markets. rising demand for alpaca yarns 21
Italian market for mohair, cashmere, angora, alpaca 6472
medullated fibers. SAWTRI study 2426
mohair and wool worsted suiting fabrics. performance during making-up 7678
raising goats and harvesting, fiber definition 5614
raw wool and mohair. effects on woolen system processing 7284
sonic digitizer technique to measure medullation 8687
United States production of mohair [1988]. reasons behind increase 1615
wool and mohair research laboratory. Texas A&M seeks rapid, objective measurement techniques 7807

MOISTURE PHENOMENA (SEE ALSO OTHER HEADINGS, SUCH AS AIR CONDITIONING, COMFORT, CONDITIONING, DRYING, HUMIDITY, STEAMING)
absorbency and fluid properties in rayon and polypropylene air-laid needle punched fabrics 4373
absorbency. coverstock materials for incontinence pads 6033
absorbency. distribution mechanisms 6073
absorbency. single fiber wetting measurements 4651
air permeability of wet fabrics. interaction of clearance factor and capillary structure 8386
amine and alkali-treated polyester fibers. hydrophilic properties 4061
care procedures for velvet fabrics. effect of moisture 6999
cellulosic absorbents. fluid migration measured by computed tomography 4686
cellulosic fabrics. examination by NMR spectroscopy 8377
chafing of silk from abrasion and moisture. solution 4482
clamminess, sensory mechanism studied with respect to wear comfort 1422
cotton. different moisture instruments evaluated for use with HVI system 7051
crosslinked DMDHEU and cotton. pore structure and solute accessibility 4485
crosslinked polyethylene glycol bonded to fabric. absorbency and wear 4299
Deltamoist meter from James H. Heal. measures moisture regain in all textiles 7094
deposition of drops from liquid dispersion onto surface of collecting fiber 8690
diaper waistbands. hot melt moisture barriers 1359
diapers, Proctor and Gamble incorporates pH control agents in diapers to combat diaper rash 7719
discoloration of fabrics caused by solubility of sizing or finish 2729
dressings from Thoratec. liquid water resistant, vapor water permeable. segmented block polymers 7750
drying performance test with slightly alkaline water and thymolphthalein indicator to evaluate cotton, polyester, wool samples 8712
Dunova modacrylic fiber in multilayer athletic fabrics 3280
effect of late season rain on [1984] cotton crop in Mississippi Delta 7992
effect of moisture on textiles 3540
fabric structure. moisture induced changes 2662
fabrics as liquid barriers. development of improved protective clothing for United States Army 6276
Fiberite 976 resin. cure and moisture 6002
finishes considered for water vapor transmission 8570
fluid spreading in web structures 4675
fluid transport performance in low density absorbent structures 4676
gin drying system. fundamentals of moisture removal from cotton. drying mechanisms 6443
gravimetric method to monitor the rate of water transport through a flexible porous barrier, Textile Research Institute 3837
hygrothermomechanical fiber composite fatigue. simulation 4328
influence of moisture on drycleaning system 7004
James H. Heal's Deltamoist meter. measures regain 6327
knit fabrics of cotton and polyester compared (Conf. Paper) 8707
knit wool fabric. humidity and pilling 8744
leather relaxation from moisture, formula to determine tension levels 672
liquids. capillary spreading of drops in fabrics. measurement with image analyzer 6277

manmade/cotton blended fibers. estimation of composition in binary blends using Brabender moisture tester 5455
Novatherm Klimageraete humidity control systems to maintain textile quality 3935
nylon filament uniformity. affected by moisture content 905
particulate migration. inducement and measurement 3038
penetration, water vapor diffusion. pot model test method for apparel 4684
regain in jute reduced by chemical treatment 7278
resistance of fibrous material to forced passage of liquid 4679
silk cocoons. testing moisture content with microwaves 656
still air layer adhering to plastic plates and fabric. thickness 2664
Streat Moisture Meter measures regain of loose wool emerging from dryer 8461
Teijin and Unitika. fabric for sports apparel which absorbs and evaporates perspiration 6792
testing performance characteristics absorbent products. diapers and pads 4691
thermally bonded cellulose pads 4625
vapor transport. mechanism. monolithic breathable barrier films 6055
viscose fiber webs. spin finishes effect on absorbency properties 1158
viscose rayon and nylon 6. heat of moisture sorption. measurement by heat transfer calorimeter 1446
water vapor transmission through fabric 8732
water-ethanol separation by pervaporation through silk fibroin membranes 7083
Wellkey hollow fiber by Teijin. absorbent and rapid drying 7345
woven fabric, moisture transfer. model for apparel comfort testing methods 5469

MOISTURE REMOVAL, SEE DRYING.

MOLDING (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL MANUFACTURE, COATED FABRICS, COMPOSITES, FINISHING, FUSING, LAMINATED FABRICS, PRESSING)
compression molded composite with parallel reinforcing filaments 7465
Du Pont Avimid N polyimide chopped fiber molding compound. high performance parts 4304
glass fiber reinforced polymers. controlling materials and molding conditions to produce smooth surfaces 8333
polyethylene, high molecular weight. effect of molding condition on thermal and mechanical properties 920
seat cushions and back-rests, vacuum formed fabrics, foam filled in place 2828
tensile strength and fatigue life of SMC-R50 sheet molding compound composites. hole stress concentration 6014
Thermal Expansion Resin Transfer Molding process, braided fiber design, end products 5093
thermotropic polyester 5708
vacuum bag molding technique for composite production 5949

MONITORING, SEE MONITORING SYSTEMS AND UNDER SUBJECT HEADINGS OF SPECIFIC TEXTILE MACHINERY.

MONITORING SYSTEMS (SEE ALSO OTHER HEADINGS, SUCH AS COMPUTERS AND PROGRAMMING, INSPECTION, TENSION CONTROL DEVICES, AND UNDER SUBJECT HEADINGS OF SPECIFIC TEXTILE MACHINERY, SUCH AS KNITTING MACHINERY, LOOMS AND SPINNING MACHINERY)
acoustic emission testing for metal and plastic equipment 7796
automatic detection and testing of splices with Textechno devices 4106
Barco Industries developed Sycotex system for computer integrated manufacturing with multiple applications (Trade Lit.) 8796
carpet finishing, monitoring, control systems for automatic straighteners 4388
Cericont System 8814
consistency of color matching in fabrics, causes of mismatching. inspection, measuring instruments 6851
Dow's Interfacial Testing System, measures interfacial shear strength of fiber-resin bonds 7165
dye pH value measured using Joseph Jasper's Simpledos 4448
dyehouse, Vald. Henriksen's Microcom central control and supervising system 4428
electronics in the control and automation of wet processing 8437
Erwin Sick Optik LC900 system for automatic fabric inspection 6022
fiber, virgin or reclaimed. volumetric feeder for use in soft disposables industry from Osprey Corporation 3922
finishing. Gossen's Pantatherm D4 temperature control system 4411
Flexi-Spray applicator and flow monitor for application of performance compounds 1800
Formaldemeter from Shirley Institute. determines formaldehyde release. instrument, testing process 5513
gravimetric method to monitor the rate of water transport through a flexible porous barrier, Textile Research Institute 3837
Grob's warp stop motion machines 4200
IMB [1988] at Cologne. overview of computer systems for design, manufacture and monitoring 7888
instruments for rapid assessment of cotton fiber maturity 5617
intelligent manufacturing systems predicted for textile industry. Intellitex system from Institute of Textile Technology 3200
ITMA [1987]. auxiliary equipment, transport, testing systems 7178
ITMA [1987]. highlights of control and monitoring systems 730
ITMA [1987]. Picanol GTM loom. PSO system for automatic repair of weft stops 4183
ITMA [1987]. textile testing machinery. data gathering 5459
ITMA [1987]. texturing machinery, false twist and air 4960
jet. VH Jet 80 range of dyeing machines from Vald. Hendriksen 5243
KES Control System from Kato Tech. four testers to measure tensile, shear, pure bending, surface friction, roughness 1457
Kirstol Limited's Color and Process System group, measurement equipment. dyeing control 5278
knitting machinery, circular. Mayer & Cie 5073
linear density controller for carded sliver improves spinning 7365
liquid flowmeters, types. operating principles 3039
Lummus Industries blade monitor for tow cutting machinery 6572
microprocessor control system for web guidance, Erhardt + Leimer's Elcom 18 unit 4721
needle load sensor device, improved needle design 6731
NK30 optical light sensor to detect needle defects on circular knitters 4253
optical sensor method, fiber orientation 4096
peel strength tester, how it works. proper heat seal between a label and a garment 2867
projectile, rapier, jet weaving methods. computer integration, monitoring systems 6658
Prokostop 4408 control unit for controlling Prokostop yarn sheet monitor on warp knitting machines 5946
rapier. G6100 weaving machines from Sulzer Rueti 1754
rotor spinning. yarn fault detection. Zellweger's Uster Polyguard system 8176
Siroclear sensing device for wool contaminants at winding stage 8238
sliver processing. Uster Sliverdata for continuous monitoring 3338
sliver thickness monitoring by ultrasonic method 4661
Spinlab Sliver Monitor 700 System. sliver evenness monitor 938
STB sensor system for draw loom, control, components 4198
TALC. voluntary standard for flagging fabric defects 5478
technology. Baeckman CMOS rheostat 4726
tensiometers, mechanical and electronic. from Hans Schmidt 8695
testing, asbestos in ambient air determined by microscopy methods 3066
textile mills, computer applications, WestPoint Pepperell, Avondale Mills, Swift Textiles. production control, inventory control 5509
thermosol dyeing. Monfor-Matic fabric temperature monitoring and measuring system 1225

ultraviolet and visible spectroscopy for assessing the nature, color, and fluorescence of textiles 7081
unwinding textured polyester filament yarns, false twist. behavior and process optimization 4966
Video Speed Master. remote measurement. length and speed of nonwoven fabrics 8720
VSI Video Shrink Inspector measures changes in fabric shape. optical pattern recognition 5466
warp breakage indicator from Textile Institute 8838
warp sheet device, computer controlled, Prokostop 4408 unit 8270
water vapor transport through flexible porous barrier. gravimetric monitoring systems 2222
weaving mill executives from South Carolina consider needs 2593
West Point Foundry and Machine Company's Electrosense warping creel yarn break detection system 3419
winding yarn packages. Digicone system 8250
yarn fault classifying system, hairiness measuring system, yarn tension measuring system 8815
yarn twist. digital multifunctional tester. BTRA 8697
yarn. Corolab for Autocoro rotor spinner 3368 5765 5775
Zellweger Uster Tester 3C/Automatic Digital Testing and Analysis Station for filament yarns, at Fiber Producer Exhibition 3819
Zellweger Uster. devices for random sampling to measure yarn quality 4926

MOTHPROOFING, SEE INSECTPROOFING.

MOTORS, SEE ELECTRICAL EQUIPMENT, DRIVES.

NAPPING
polymer fittings on napping machines. guidelines for use on wool fabrics 5331
teasel napping, tests on factors affecting yarn hairiness 4964

NAPPING MACHINERY
India, industry growth projected 2427
Indian jute industry analysis, problems, improvement 2428
ITMA [1987]. machines for narrow fabrics. labels and elastics. computerization 6649
Polifleece by Sucker + Mueller 6162
polymer fittings and guidelines for use on wool fabrics 5331

NARROW FABRIC LOOMS
electronic jacquards 2584
Flextex and Superflex types with interchangeable heads by Mageba 1765
history. Europe, Africa. Dreieichenhain exhibit. Eugenia loom 4177
ITMA [1987] exhibits. trend toward shuttleless mechanisms 5019
ITMA [1987]. innovations and improvements 2583
ITMA [1987]. machine overview 8266
latch needles used to form selvage, load 7166
Schneider-Gerster J/HE line of electronically controlled jacquard machines for narrow fabric weaving 6656

NARROW FABRICS (SEE ALSO OTHER HEADINGS, SUCH AS BRAIDING, INSPECTION, WEAVING, AND UNDER SUBJECT HEADINGS OF OTHER SPECIFIC PROCESSES)
adhesive tapes, example of use of textile carriers 1819
bindings, elastics, narrow fabrics, and webbings. suppliers and products at Bobbin Show [1987] 341
Comez crocheting machine series 7439
cutting. Dado Industries' Rollmaster strip cutter for beltings, laces, zipper tapes 5378
ITMA [1987]. dyeing and finishing 2707
ITMA [1987]. machines for narrow fabrics. labels and elastics. computerization 6649
ITMA [1987]. narrow fabric looms. trend toward shuttleless mechanisms 5019
manufacture using knitting machinery 5144
manufacturers and suppliers, narrow fabric industry. directory 6793
Mecmor Variatex TEJ. new 180 TEJ version. width variation 5928
Metap knit-weaving. special purpose fabrics with synthetic fibers 4297
plasma torch cutting. non-transferred torch design, suited to cutting thin, non-conducting materials 2019
ribbon. tension levels, parameters 5033
seat belts. British standards for performance 6048

NEEDLED FABRICS (SEE ALSO OTHER HEADINGS, SUCH AS CARPETS, NONWOVEN FABRICS, PAPERMAKING FABRICS, STITCHBONDED FABRICS)
air permeability and fiber volume fraction 8414
composite pressed nonwovens. acoustic insulation from fiber wastes 4374
cotton industry, use of needle punched and nonwoven fabrics 1799
date palm leaf, needlepunched nonwovens. use of coarse and fine needles 1880
designs and needlepunching equipment developments 1804
Di-Lour system from Oskar Dilo for needle punched fabrics 8334
DI-LOUR-S needle loom from Oskar Dilo and DI-LOOP machine type DS 3490
Dilo Di-Loop needle loom for surface structuring of preneedled felts for automotive industry 3488
drainage geotextiles. comparison of needle punched or spunbonded synthetics, virgin synthetics or recycled fibers 6774
dyed nonwovens, soil repellent finishing, special tests on color changes 6025
European markets 2165
examination of process and recent developments 6728
felt needlers for papermills. innovations by Dilo, Beltex, PMF, OD-I 7475
filter fabrics for gas filtration, structures, compositions 363
geotextile applications for needled fabrics 3541
geotextile nonwovens. load bearing capacity determined 7525
Groz Beckert felting and forked needles for nonwovens 4274
load distribution on punching elements 6726
machinery, needling, from Dilo 6723
multi-axial web composite fabric on Karl Mayer raschel type RS 2 DS-V machine 8325
needle penetration depth. effect on filtration performance 2666
needled fabric manufacture. effect on fabric properties 3498
needled felt in gas filtration. techniques. European market 6762
needled wool/nylon/nylon 6/viscose, anisotropy 6797
needlepunched fabric with Inidex flame retardant fiber 2689
needlepunched geotextiles from synthetic fiber wastes 2677
needlepunched outdoor materials. structure effects on thermal properties 7545
needles. machines by Dilo, Fehrer, Asselin, Automatex 6794
nonwovens production. strength properties of fluorine fibers determined 50
polypropylene needled nonwoven, production, properties 277
soiling, color change, photoelectric testing 5123
status of needlepunched nonwovens industry in United States 2620

NEPS (SEE ALSO OTHER HEADINGS, SUCH AS FIBER QUALITY, FABRIC DEFECTS, FABRIC QUALITY, YARN QUALITY, IDENTIFICATION)
cotton neps. microscopic analysis 6473
cotton. Pima. green motes traced to formation of ovule fibers and ineffective pollination 5605
Mississippi Delta cotton. effects of varieties, harvesting, and ginning on nep content 8001
neps in cotton fiber. new instrument and method for automated counting and sizing 7052
revolving flat cards. Mini workshop for in-works maintenance 8165
rotor spun polyester yarns. classification 8693

NETS, SEE FABRIC PRODUCTS.

NITRILON IS AN ACRYLIC FIBER.

NITRON IS AN ACRYLIC FIBER.

NOISE (SEE ALSO OTHER HEADINGS, SUCH AS INDUSTRIAL HEALTH AND SAFETY, LEGISLATION, REGULATIONS)
acoustic baffling wall, flexible, made with Trevira polyester from Hoechst 6037
noise damping on Scragg SDS-2 texturing device, system design by Polmatex-Cenaro 4137
open end and ring spinning frames 6381
open end spinning machinery tested via sound intensity instrument 7380
outerwear fabric, Cordura from Du Pont, passes noise tests 5126
reduction in textile machinery for safety requirements 4759
ring spinning, cotton. test methods to reduce noise levels 948
shuttle looms. noise reduction study 2319
steam injection. noise control measures to comply with EEC directive 5552
textile machinery. ring and open end spinning frames, shuttle and air jet looms 756

NOMEX IS AN ARAMID FIBER.

NONWOVEN FABRIC MANUFACTURE (SEE ALSO OTHER HEADINGS, SUCH AS DISPOSABLES, PAPER, STITCH BONDED MACHINERY)
adhesive bonding. spraying techniques and processes used. advantages 6725
adhesive polyester/viscose nonwovens, production, properties, uses 273
advances in processing and bonding. new nonwovens made with Fleissner equipment 5977
advertisements, information from suppliers of nonwovens machinery, raw materials, fabrics, and converting services 5148
agricultural applications. properties contributing to successful use 344
air flow configurations used in melt-blown process 4278
asbestos-free friction facings. evaporating solvent avoided 8339
automotive industry increases use of nonwovens. production technology for specialized market 3497
binding polyester nonwovens with resin powders applied by spray gun 274
Bonar Carelle nonwoven polyester fibers bonded with polyester powder 3293
Bonar Carelle specializes in powder bonding 8335
bonding methods. seminar at Haus der Technik in Essen 8330
bonding with water jets. Honeycomb and Perfojet systems 5953
business success in nonwovens manufacture 6341
Campen's Type IT-800 batch winding and unwinding system for nonwovens and synthetic leather operations 3489
Carelle Ultrasoft and Carelle Ultraloft powder-bonded nonwoven lines 342
carpeting systems. Contifi and Stoddard Holdings 7462
Celanese Industrial Fibers quality control program 6363
Celatose company profile. private label diaper manufacture 2955
Cellca. viscose produced from cellulose and urea used for nonwovens 91
complete manufacturing lines by Asselin seen at ITMA. nonwovens production 742
composite nonwovens, high added value. production 5985
contactless length measurement of nonwoven webs 660
continuous flat press unit developed by Stork Brabant 1063
controlled fiberization spray technology 2622
crop protection, field scale vegetables, by Polycrop Growing Systems 345
CSIRO develops nonwoven made of blended wool and manmade fibers for use in quilts. thermal bonding 1805
Danaklon. production of bicomponent and polypropylene fibers for nonwovens industry 8097
definitions of fibers and production processes 5688
density and width control maintained with sensor system 275
designs and needlepunching equipment developments 1804
DeVilbiss contactless spray applicators for high loft nonwovens 3677
Dexter Corporation quality control program 6364
DI-LOUR-S needle loom from Oskar Dilo and DI-LOOP machine type DS 3490
Dilo Maschinenfabrik's Di-Loom PMF for Beltex papermaking felts 3491
Dragon system/GS from Hergeth Hollingsworth. production of sandwich nonwoven fabrics on one machine 3492
drawing and fibrillation processes combined. Scrinyl nonwoven web and reinforcement material 1151
dry laid processes 4279
dry-forming, meltblown, thermal bonding, and ultrasonic technologies discussed at Edana's Nordic Symposium 5146
dryer, perforated vacuum drum. Fleissner 6158
durable nonwovens. leading markets, volume of fabric, technology, production 6057
East European textile machinery developments 7897
EDANA Nordic Nonwovens Symposium [1988]. technology, fibers, markets. superabsorbent polymers 6621
electrostatic melt spinning process. high voltage field on molten thermoplastic 946
Enka's polyester-polyethylene fiber in thermobonded nonwovens. melting point properties, bulk and hand discussed 1644
equipment from Kanneglesser France and Freudenburg, thermobonding presses and nonwoven fabric machinery 2623
Exxon to purchase ICI's geotextile division and Terram-producing plant 6549
fabric substrates for carbon fiber reinforced carbon composites 8340
Fehrer K-21 Random Carding Machine for light web production. process, fiber application 6562
Fehrer Type K21 random card for nonwovens applications in medical textiles and disposables 5733
Fehrer VF/V21R/K21 high capacity nonwovens line. sanitary and medical applications 8336
Fehrer's K-21 Random Card, maximum fiber throughput, optimum web quality 1517
fiber defects in wet-lay nonwoven fabrics. types, causes, remedies 6051
fiber opening and blending. effects on nonwoven end-products 927
fiber orientation in web structure. effect on properties 4280
Fiberweb. products and management 1876
Fleissner compact lines for production of manmade fibers for nonwovens industry 8058
Fleissner equipment for manufacturing and processing dry laid, wet laid, and melt-blown webs 1806
Fleissner's line for thermal or foam impregnation bonding. high vacuum flow through drum 3493
Fleissner. new machinery 8337
floppy disk liners. fibers, web structure and bonding method 1423
Flow Systems' intensifier pump in Waterjet and Waterknife cutting systems 2018
fluorochemical treatment for superior barrier properties 4281
forecasts and directions for the future of the industry 5822
Frost and Sullivan report on durable nonwoven roll goods, fiberfill shipments, popular fibers, processing methods 6049
glass fibers in nonwovens. production 5978
Graflok. unidirectional carbon fiber reinforcement composite from Heinsco Limited 1147
Great Britain. nonwovens industry and recent developments 6724
Groz Beckert needles. felting and forked for use with nonwovens 4274
Hergeth Hollingsworth of Germany profile. nonwovens production 272
Hi-Tech heat bonding method developed by Fleissner 1061
Hi-Tech thermal technique from Fleissner. uniform bonding in nonwoven webs. other Fleissner machinery 3494
high technology fibers. growth outside military and aerospace markets 4282
Hof Nonwovens Seminar [1987]. highlights 3495
Honeycomb Systems' Trex Thru-Drying System for webs, features and configuration 5961
horticultural applications. screens for climate and energy

regulation, water management 346
hot melt application systems. melting/metering, applying. new coating method 347
hydraulic entanglement process. production line examined 8341
hydraulic entanglement. laboratory system from Honeycomb 1064
hydro-entanglement growth. production systems 8342
hydroentanglement bonding for nonwovens production. process, applications, developments 5950
hygiene products. functions and requirements of spin finishing 299
hygienic and geotechnical fabrics. Nonwovens Conference in Brno 3987
ICI selling Terram geotextiles business to Exxon Chemical 6769
IDEA [1986]. polyethylene, fiber grade resins, demonstrated 4033
IMPACT [1987]. conference 1054
INDA nonwovens handbook on products, manufacture, growth of industry 7971
INDA-TEC sponsored by Association of Nonwoven Fabric Industry 1055
INDA/EDANA [1988-1989] nonwovens directory 7972
INDEX [1987] Congress papers. binders for nonwovens. bicomponent fibers 45
INDEX [1987] Congress papers. meltblowns, spunlaced nonwovens, thermobonding 285
INDEX [1987] Congress Papers. web formation, fiber opening and blending, random cards 1148
INDEX [1987] nonwovens. EDANA recognizes outstanding nonwovens manufacturers 2391
INDEX [1987]. innovative nonwoven products 2392
industry review, international. products and developments, plants 1875
industry. United States leadership challenged. Filter Media Consulting report 4375
innovations in textile properties. improved appearance 6021
International Nonwovens Technological Conference [1987] 5972
International Nonwovens Technological Conference [1988] 5971
Interplastica's Termoplast heat setting machine for thermoplastic nonwovens 2800
investment strategies in the nonwovens industry 1153
isotropic felts. new randomized fiber deposition system 8343
ITMA [1987] exhibition 5145
ITMA [1987] innovations 3496
ITMA [1987], nonwoven fabric technology 2616
ITMA [1987], nonwoven processing equipment reviewed 1874
ITMA [1987]. developments in fine and isotropic fiber webs 6720
ITMA [1987]. equipment displayed 1152
ITMA [1987]. making-up. machinery trends 6193
ITMA [1987]. manufacturing and processing equipment 1154
ITMA [1987]. new techniques. collaboration in industry 6050
ITMA [1987]. nonwoven development trends 5970
James River and Holmens Bruk joint venture 3033
Japan. spunlace nonwovens production. increased production and demand 6795
Japanese production and expansion plans in nonwovens fabrics manufacture 4773
K-21 random card from Fehrer 8338
K-21 Random Carding Machine from Fehrer 1807
Kimberley-Clark develops new diaper cover from nonwoven elastic web 6223
knitting fiber wastes used for outerwear batting 8344
Lantor Aquamat capillary matting for water management for container grown stock 343
latex binders, binding techniques for disposable nonwovens 5960
latex bonding. flexible operating temperatures 8345
latex polymer bonding to improve strength and durability 4283
leather substitute nonwoven production installed at Polish felt mill 5099
load distribution on punching elements 6726
LT-2000 nonwoven production line and use of wastes 4275
Malimo stitchbonded nonwovens from the Malivlies N 2400 unit 3506
manmade available to nonwovens roll goods manufacturers. buyers' guide 6518
manmade staple fiber shipment figures [1987]. percentages to nonwoven roll goods producers 6521
manmade tow for nonwovens applications 2494
manufacturer profiles. top twelve United States companies 8748
market situation, international 1133
mechanical properties of fibers. effect on nonwoven performance 4284
medical and hospital applications. spunlaced and melt blown processes 1155
melt blowing polypropylene resins. morphology and mechanical properties 4285
melt blowing polypropylene resins 4286
melt blown process profiled. technology consumes a significant amount of energy and has a low output 1065
melt blown technology, impact on composite spunbonding/dry-laid nonwovens manufacture 1808
melt-blown webs. ethylene copolymers evaluated for stretch recovery 4287
meltblowing, description 5979
meltblowing. process. resin tailoring and resin effects on fabric properties 276
meltblown process. UMIST conference paper 7473
meltblown technology. key features. process outline 8346
mesh spinneret spinning from Teijin 8066
mesh spinneret spinning technology. Teijin 5689
microporous membrane. Repel from Gelman Sciences 8417
Milliken, Sommer-Allibert joint venture mill 8752
mulches and film covers used by United Kingdom horticulture industry. test data 348
multilayer webs. Dragon System from Hergeth Hollingsworth 7474
needle looms from Dilo for web bonding 6722
needle punching. BTRA 6727
needle punching. fluid flow through needle punched fabrics 6052
needle punching. history and current applications 5980
needle technology. Groz-Beckert developments 4156
needled fabric manufacture. effect on fabric properties 3498
needled fabrics. examination of process. recent developments in field 6728
needling machinery from Dilo 6723
nonwoven and laminated structure bonding with thermoplastic, low melting, semi-crystalline polyester powders 1792
nonwoven manufacturing methods. applications. future 3499
nonwoven products [1988]. compositions, uses, production methods 5150
nonwovens industry. [1988] buyers' guide 6619
nonwovens line, Asselin's Digipot, and others. needle punching machines 2313
Norafin process for nonwovens from VEB Technotex 5973
Nordic Nonwovens Symposium. summary of papers 8329
Nordson Nonwoven Products Group. hot melt spray adhesive delivery systems. controlled fiberization technology 1149
oil absorbent, water resistant fabric developed by Societe Industrielle des Carnis 1885
olefin fiber consumption grows. applications 1066
Oskar Dilo's Beltex technology for production of machine-oriented papermakers' felts 5974
Paratherm and Paratex from Lohmann 1877
patents examined to study innovation in nonwovens industry 5151
Patterned Bonded Nylon II manufactured by James River 1070
Perfojet entanglement process. hydraulic compaction, structuration, and entanglement 1062
physics of melt-blown processes based on current flow theory 4288
plaiting as multiaxial binding for nonwovens 3500
polyester filters. denier blends versus filtration and air flow 8347
polyethylene for monofilament and oriented tape 4289
polymer binders for nonwovens. formaldehyde-free, wet resistant and heat sealable 287
polypropylene fiber production linked directly to drylaid nonwoven production 1156
polypropylene needled nonwoven, production, properties 277
polypropylene staple yarn production for nonwovens manufacture

1686
polypropylene, rayon, heterofil bicomponent, and cotton fibers in thermal bonding nonwoven constructions 3542
pre-stressed webs. cotton 8348
Private Label Manufacturers Association trade show. nonwovens products shown 2617
process technology for medical textiles 1854
production of felt wadding for hunting ammunition 3484
production techniques. brief history of and directions for the future 8349
projected spunlaced nonwovens manufacturing capacity. demand, consumption figures 1809
properties of manmade fibers and their effective use in nonwoven industry 3278
properties, physical and chemical, important for nonwoven manufacture 349
quilted nonwovens bonded with ultrasound 5994
Random Fiber Composite process from Dow Chemical, wet laid process for production of polymeric material 5957
random web card. K21 from Fehrer 8331
recycled synthetic fiber waste used in medical and geotextile fields. technology, methods 3543
Reicofil process for spunbonding polyolefin fabrics 4276
RORA produces machine lien for processing textile wastes 3334
sanitary napkin production adapted to Polish materials and machinery 4290
Scotland, textile industry survey, company profiles, products 3151
self-regulating card feed and adjustable calenders for thermobonded nonwoven production 3501
sew/knit patent. East Germany 8307
Shirley Institute. biochemical technology patent for nonwovens production. fungal mycelia and fibers from filter media 1150
Smith Family processes textile wastes to manufacture wipes 5491
Soviet nonwoven machinery and inefficiency compared to European counterparts 4277
spot-form reinforcement in nonwoven fabrics. mathematical parameters 1810
spunbond technology. advantages. availability. changes 279
spunbonded and drylaid. technical requirements for coverstock for baby diapers and incontinence products 350
spunbondeds. compact line from Reifenhauser 2624
spunbonding technology 8076
spunbonding versus thermal bonding 1067
spunbonding, description 5981
spunbonding, sealed nonwovens. Reicofil and Reicotex processes for polypropylene and polyethylene 278
spunlace fabrics. technology, properties, applications. list of manufacturers 4291
spunlaced aramids from Du Pont 1888
spunlaced nonwovens. process details and economics. market 351
status of needlepunched nonwovens industry in United States 2620
stitch reinforced web materials made on Type RS3 MSU-V unit. Karl Mayer 1889
Stork Brabant process for thermobonding nonthermoplastic fibers into nonwoven fabric 5975
strength of adhesive bonds between impregnated latex and nonwovens, influencing factors 4483
stronger chitin nonwoven for wound dressings, resin bonding with polymers. wet-lay production process, fabric properties 5137
substrateless production of nonwovens. applications 3502
suppliers directory 8350
TDS developed by Honshu Paper. air laid and thermobonding technologies 2621
technology and growth in industrial applications 4292
temperature and pressure, effect on web manufacture. calender roll function, Thermo-Hydrein roller system 3503
Texmet. metallized acrylic fiber developed by Intituto Guido Donegani with applications in nonwovens 2446
Textile and Technology Exhibition 8381
textiles for agriculture and horticulture 352
thermal bonding equipment for nonwovens from a variety of international companies 3504
thermal bonding of nonwovens. advantages, limitations. various systems 288
thermal bonding of nonwovens. grows in popularity at the expense of resin bondings 6714
thermal bonding procedures using polyester fiber and adhesives 4293
thermal bonding with convection heat. equipment, operation, products 353
Thermo-Hydrein roller system. thermobonding 5976
thermoadhesive fibers. advantages and parameters of thermal binding 1811
thermobonded nonwovens, special fiber production. fusion bonding 355
thermobonded nonwovens. effects of pressure and temperature in roller nip. Thermo-Hydrein roller system 354
thermobonding fibers, PA and PES, from EMS-Grilon 280
thermobonding improved through calender pressure and temperature control 1812
thermobonding units from Fleissner and Scandimex. use of synthetic pulp blends for disposable hygiene products 2625
thermobonding, effects of moisture 5986
trends in the nonwovens industry. investment strategies 1157
Trex Thru-Dryer by Honeycomb Systems. for drying, curing, bonding of dry-laid permeable webs 7472
Truetzschler fiber preparation machinery for nonwovens manufacture 3339
Type RS 3 MSU-V raschel machine manufactured by Karl Mayer for production of nonwovens with warp-knit reinforcement 8411
Ultraloft powder bonded nonwovens. three dimensional printing 1878
ultrasonic seaming of nonwoven products. project at Shirley Institute 8608
United States market entry. factors to consider. costs, competition, quality, service 5147
United States nonwovens market 3103
varieties in development. quality control. production by Viscose Europe 4294
viscose fiber modification. friction, absorption, resistance to sterilization 100
viscose fiber webs. spin finishes effect on properties. absorbency 1158
wastes used in nonwoven geotextiles. fabric properties 1068
water jet entangled systems, use in United States 3035
web drying innovations from Spooner 7658
web formation kinematics. spunbonded nonwovens. factors in spinning and bonding 1159
web formation studies, manufacturing fabric directly from the spinning stage 1813
web forming. carding, air lay, and centrifugal dynamic processes 5982
web handling equipment for continuous processing from Edward Parkinson Manufacturing 1160
webs. fiber realignment, roller/randomizing roller 1161
Western Europe converters and manufacturers directory 8412
WestPoint Pepperell to sell Lantor International nonwovens company 3113
wet form nonwoven fabrics for filtration and reinforcement 4295
wet lay process, description. emphasis on stock preparation 5983
wet laying to spunbonding, review 6729
wipes. nonwoven wipes industry in United States 1069

NONWOVEN FABRICS (SEE ALSO OTHER HEADINGS, SUCH AS COMPOSITES, BATTINGS, DISPOSABLES, FABRIC PRODUCTS, FELT, FOAMS, GLASS FABRICS, HEALTHCARE AND MEDICAL TEXTILES, HOME FUNISHINGS, LAMINATES, LEATHER SUBSTITUTES, NEEDLED FABRICS, PAPER, STITCHBONDED FABRICS)
A+A Exhibition. protective clothing 8648
absorbency and fluid properties in rayon and polypropylene air-laid needle punched fabrics 4373
absorbency, liquid. uptake rates. influences 6054

absorbency. coverstock materials for incontinence pads 6033
absorbency. distribution mechanisms 6073
absorbent characteristics of nonwovens. fluids 6076
acrylate binder. determination of concentration 8737
adhesive attached to waterproofed fabric 8617
adhesive nonwovens as plaster substrates 3545
adhesive polyester/viscose nonwovens, production, properties, uses 273
advertisements, information from suppliers of nonwovens machinery, raw materials, fabrics, and converting services 5148
agricultural and horticultural applications 360
air flow configurations used in melt-blown process 4278
air permeability and fiber volume fraction 8414
air permeability tester. Flotec from Enka 3055
air/gas/dust filtration. nonwoven filter media, baghouse and liquid filtration 1098
anisotropic properties, tear load, elongation, relation to fibers, finishes 5119
antibacterial waddings. polyester fiber impregnated with zeolite 7478
aramid fibers. Kermel manufactured by Rhone-Poulenc 867
automotive fabric products. requirements, test methods 7075
automotive industry increases use of nonwovens. production technology for specialized market 3497
automotive seat fabrics from Foss Manufacturing 1879
bacterial barrier properties of surgical drapes and gowns, face masks, instrument tray wraps 1106
barrier films, monolithic breathable 6055
battery separators 6056
bituminous roofs. roll roofing materials 361
Bonar Carelle nonwoven polyester fibers bonded with polyester powder 3293
bonding, resin pattern. soft nonwovens 5984
Burlington's sale of Precision Fabrics division which produces various fabrics. sales details 3087
buyer's guide for users of nonwoven roll goods 5149
Carelle Ultrasoft and Carelle Ultraloft powder-bonded nonwovens line 342
cement laminates, nonwoven fabric reinforced 6038
civil engineering. nonwovens. applications for Pegaso's PEGEO 4364
combination of nonwovens and water vapor permeable membranes to form laminates 1140
composite fabric, wool and polyester, commercial interior fabric called Novus 1164
composite nonwovens, high added value. production 5985
composite pressed nonwovens. acoustic insulation from fiber wastes 4374
compression in nonwoven insulating fabrics as a function of effectiveness 6752
conductive acrylic fibers for antistatic carpets in computer rooms 5643
conductive. Lantorine fabrics based on aluminum, nickel, copper 8415
continuous flat press unit developed by Stork Brabant 1063
converters' share of nonwovens market. profits, equipment, market influences 1814
cotton and nonwovens compared when used in operating room drapes, surgical gowns 1109
cotton industry, use of needle punched and nonwoven fabrics 1799
coupling agents, neoalkoxy titanate and zirconate. polymeric composites 6011
CSIRO develops nonwoven made of blended wool and manmade fibers for use in quilts. thermal bonding 1805
cutting. Aqua Jet water jet that cuts through Kevlar 6187
Daltex from Don and Low. spunbonded nonwoven fabric 6801
date palm leaf, needlepunched nonwovens. use of coarse and fine needles 1880
definitions of fibers and nonwovens production processes 5688
definitions of nonwovens. lack uniformity and standardization 8416
diapers, disposable and cloth. diaper rash 6034
diapers, [1987] manufacturing and market statistics 2957
diskette nonwoven liner fabric/magnetic media dynamic contact in floppy disk 7541
disposable hygienic products, thermally bonded absorbent core technology 1881
Don and Low spunbonded nonwoven, Dal-Tex, for medical textiles 5992
drainage geotextiles. comparison of needle punched or spunbonded synthetics, virgin synthetics or recycled fibers 6774
dry laid processes 4279
durable nonwovens. leading markets, volume of fabric, technology, production 6057
dyed nonwovens, soil repellent finishing, special tests on color changes 6025
Ecolan and Ecostar, disposable, biodegradable material. Ecolan products, applications, biodegradation process 6053
elastics. disposable diapers 6058
European Community integration process. challenges and opportunities for nonwovens manufacturers 4987
European market. opportunities for nonwovens companies 4988
exchange for Austrian superhighway. manmade fiber fleece as substrate 7759
exporting considerations for international markets 5582
facing material for absorbent articles. combined nonwoven fabric from UniCharm 8382
fiber orientation in web structure. effect on properties 4280
fiber types incorporated into nonwoven products 1066
Fibersorb superabsorbent nonwoven web. nonacrylic-based resin 6016
Fiberweb. products and management 1876
filter fabrics for gas filtration, structures, compositions 363
filter fabrics. needle-bonded polypropylene fibers. new gas and solid filtration apparatus 6030
filters. international market 6796
filtration market, influential factors 1882
filtration mechanisms. fibrous nonwoven filter media structures 1101
finishing techniques to satisfy consumer demands 3552
fire retardant fibers from EniChem and Rhone-Poulenc 1657
floppy disk. liner fabrics. effectiveness in wiping particles from media surfaces 7542
floppy disks. role of liner fabrics in controlling diskette torque, fibrous wiping of media, diskette durability 7543
fluorochemical treatment for superior barrier properties 4281
forecast [1988] by leading consultants. fibers, products, processes 1883
friction between nonwoven lining of magnetic media diskette jackets and magnetic media 7316
future technological and developmental trends for next five to ten years 1165
geotextile nonwovens. load bearing capacity determined 7525
geotextiles and roofing markets 3034
geotextiles for roadbed reinforcement. influence of fabric type, placement, and anchoring 7782
geotextiles, needle punched. puncture resistance 6059
geotextiles. dynamic loading characteristics in road construction 7530
geotextiles. permeameter flow testing of nonwoven geotextiles for drain envelope applications 7092
glass fibers in nonwovens. production 5978
health care industry, opportunities for growth 6018
healthcare and medical textile applications 1854 2388
heat sensitive filling material used in quilted articles. damage during cleaning 2075
Heat Wave Schaetti 89 powder-point bonding unit for coating nonwovens 7464
Hi-Tech heat bonding method developed by Fleissner 1061
highloft, study reveals widespread consumer dissatisfaction. manufacturers warned to improve quality control 3547
hydraulic entanglement process. production line examined 8341
hygiene absorbent products with new chemithermomechanical pulp 364

hygienic and geotechnical fabrics. Nonwovens Conference in Brno 3987
IAA International Motor Show highlights. nonwoven adhesives, automotive textiles, hot melts 356
image analysis of tracer fibers in nonwovens webs. study to increase cross-directional strength and improve fabric uniformity 5660
incontinence market. current and future. manufacturing overcapacity 592
incontinence pad coverstocks and effects on patients' skin. softness and hand of different coverstock materials 7745
incontinence products. liquid distribution mechanisms. product market 295
INDA nonwovens handbook on products, manufacture, growth of industry 7971
INDA-TEC sponsored by Association of Nonwoven Fabric Industry 1055
INDA/EDANA [1988-1989] nonwovens directory 7972
INDEX exhibit highlights. Acu-Fiber system, new Multiwebb material, and Fibrella fabric 358
INDEX [1987] Congress Papers. laminated nonwovens. water jet cutting 1138
INDEX [1987] Congress Papers. quality control. aircraft applications for composites. future trends 1162
INDEX [1987] nonwovens. EDANA recognizes outstanding nonwovens manufacturers 2391
INDEX [1987]. highlights of papers read. fibers, bonding materials, fabric formation 357
INDEX [1987]. innovative nonwoven products 2392
INDEX [1987]. new products and markets for nonwoven textiles 8967
INDEX [1987]. summaries of papers read. agriculture, hygiene, medical 3544
INDEX. bonded fabrics industry. round table discussion 362
Industrial Fabrics Association's convention. geotextiles 5995
industrial textiles, nonwovens expand market horizons 2626
industrial textiles. applications. protective clothing. geotextiles 6808
industry in EEC. fiber use patterns of polypropylene. trends 8230
industry. United States leadership challenged. Filter Media Consulting report 4375
insulation properties, thermal. air laid nonwovens 6060
interfacings. fusible and sew-ins for knitwear. new products 4376
interlinings, new type of nylon 6 fiber 5690
International Automobile Show in Frankfurt. nonwovens 6736
International Nonwovens Technological Conference [1987] 5972
International Nonwovens Technological Conference [1988] 5971
ITMA [1987] exhibition. nonwoven fabrics machinery 5145
ITMA [1987]. electronic machinery for nonwoven manufacture 8380
Japan. spunlace nonwovens production. increased production and demand 6795
jute. woolenized jute. caddis. property comparison 7544
Kimberly-Clark obtains patents for processes and products involving thermoplastic elastomeric polymers 2458
Lantorine. aluminum nonwoven surfacing tissue used for conductive composites 5996
latex bonded 8345
leather substitutes and Lorica microfiber. Japan 6047
liquid distribution mechanisms of hygienic products 296
Malimo stitchbonded nonwovens from the Malivlies N 2400 unit 3506
manmade staple fiber shipment figures [1987]. percentages to nonwoven roll goods producers 6521
manufacturer profiles. top twelve United States companies 8748
market share for nonwovens [through 1990's]. projection figures 1884
mats containing conductive fibers providing shielding against electromagnetic and radio frequency interference 1166
measuring techniques for online quality control 1044
mechanical properties of fibers. effect on nonwoven performance 4284
medical and healthcare applications. major markets, growth areas, composite technology 3548
medical textiles in French hospitals. costs, attitudes, advantages 1114
medical, geotextile, agricultural uses of manmade textiles 7532
melt blown process. superior fabric properties 1065
melt blown. Exxon process. properties and applications 6061
meltblown microfiber embossed web for medical textiles 5134
meltblown webs. properties. market applications 365
meltblown. description 5979
microporous membrane. Repel from Gelman Sciences 8417
molding or shaping of nonwovens. various methods 1043
multilayer diaper coverstock, current technology, expectations, DryTouch Huggies 6017
Multiwebb multilayer nonwovens from Finnwad. structure and properties 359
needle felts in gas and dust filtration. book 1167
needle punched. fluid flow 6052
needle punching. history and current applications 5980
needled fabric manufacture. effect on fabric properties 3498
needled wool/nylon/nylon 6/viscose, anisotropy 6797
needlepunched fabric with Inidex flame retardant fiber 2689
needlepunched outdoor materials. structure effects on thermal properties 7545
nonionogenic surfactants and influence of dyes on turbidity 3630
nonwoven filter media. constructions and filter mechanisms 3546
nonwoven flocking, electric field, method, finishing 5329
nonwoven membrane laminates. fabric thermal insulation and water vapor permeability 1139
nonwoven needlefelted filter cloths in hot gas filtration. new filter media 1103
nonwoven products [1988]. compositions, uses, production methods 5150
nonwoven spunlace fabrics. medical applications 1113
nonwoven surgical gowns. requirements, advantages over wovens 1112
nonwoven, fibrous. structure and mechanism 5998
nonwovens in filtration systems. filtration mechanisms and cartridges 1102
nonwovens in wound management and other patient care applications. masks, supporting devices, dressings, gowns, drapes 1115
nonwovens industry. [1988] buyers' guide 6619
offline finishing technologies. coating/impregnation. high vacuum metalizing 1042
oil absorbent, water resistant fabric developed by Societe Industrielle des Camis 1885
pads containing superabsorbent polymer. study of fluid movement 6072
Paratherm and Paratex from Lohmann 1877
patents examined to study innovation in nonwovens industry 5151
Patterned Bonded Nylon II manufactured by James River 1070
Pellon nonwoven fabrics laminated with Sympatex membrane to obtain new weatherproof fabrics 5097
Perfojet entanglement process improves physical properties 1062
physics of melt-blown processes based on current flow theory 4288
plaiting as multiaxial binding for nonwovens 3500
polyethylene fiber grade resins. applications in spunlacing, spunbonding, melt blown, specialty nonwovens 64
polyethylene for monofilament and oriented tape 4289
polyethylene glycol, fabric modification through crosslinking 6062
polyethylene resins, linear low density 5697
Polypropylene Textile and Fibers conference highlights 2477
pressed felt. wool. uses 1886
printing, rotary screen, of viscose/nylon 6 (Kapron) with active dyes. hydrophobic and hydrophilic fabrics tested 465
production of felt wadding for hunting ammunition 3484
production. applications from World War II to the present 8349
properties of manmade fibers and their effective use in nonwoven industry 3278
recycled synthetic fiber waste used in medical and geotextile fields. technology, methods 3543
reinforcement media for composites. fluid flow 6013

research results. polypropylene melt blown absorbing felt. high temperature needle punched felt. foaming 1166
resin binders, acrylic. medical textiles 5663
rewettability of thermally bonded polyester staple, nonwovens 5999
roofing felt. jump-fire resistant. Hoechst 1847
roofing membranes, nonwoven polyester. strain energy failure models 6040
rupture properties predicted 6063
Sick Optik's two phase, automatic laser scanning inspection system for nonwovens 2292
soft gaskets. crosslinked by electron irradiation 8418
soiling, color change, photoelectric testing 5123
solvent spun cellulosic fibers in thermal and latex bonded nonwovens 59
spectroscopy, Raman. applications 6064
spun-colored polyester pile fabric. Stratos from Foss 2690
spunbonded fabrics from polymer systems. Tyvek. Trevira. polypropylene. production methods. end-uses 7546
spunbonded Lutradur. plastic reinforcement. Lutravil 6065
spunbonded polyester nonwovens as roofing tile carrier material 1887
spunbonded road interface prevents cracking 8405
spunbonded. description 5981
spunbondeds and polyesters in roofing 332
Spunlace fabrics. production process and applications 6075
spunlace fabrics. technology, properties, applications. list of manufacturers 4281
spunlace, hydroentangled nonwovens. market study by John R. Starr 7944
spunlaced aramids from Du Pont 1888
spunlaced polyester fabrics for sheets and pillow cases, abrasion resistance 1071
Stasis, nonwoven fabrics from C. H. Dexter, fluid repellent protection for hospital and emergency fabrics 1853
status of needlepunched nonwovens industry in United States 2620
sterile fabrics. Chicopee coated polyesters with crinkled, nonplanar surface 7467
sterilization, hydrogen peroxide vapor 5819
stitch reinforced web materials made on Type RS3 MSU-V unit. Karl Mayer 1889
strength behavior, assessment. Young's modulus of elasticity 6281
structural and batting applications. polyesters with modified copolymers 8043
structural base, relation to tension damage resistance, woven, needled, knit bases 5100
structural factors affect absorbent characteristics of nonwovens, model 6066
structure, visualizing through staining techniques 6282
structure. measurement of length and speed. Video Speed Master 8720
substrateless production of nonwovens. applications 3502
surgical dressing from Kendall. improved sorption and liquid transfer 8419
survey of companies, nonwovens sales, end use markets 1169
synthetic fibers use in nonwovens applications 1891
synthetic forming fabrics. care, repair, maintenance. reduced costs, performance of nonwovens machinery 1890
TDS developed by Honshu Paper. air laid and thermobonding technologies 2621
Techtextil 2. technical textiles, fiber reinforced materials. highlights 7899
Techtextil Trade Fair, Frankfurt, technical fabrics, fibers 6421
test methods for nonwovens, performance evaluation for end uses 6798
testing flocked/nonwovens' strength, influences in model 5120
testing. Hercules Honeycomb Trex unit 8715
thermal bond fibers, polypropylene staple. Japanese production 909
thermal bonded polypropylene based nonwoven fabrics 6067
thermal bonding procedures using polyester fiber and adhesives 4293
thermal conductivity. new measurement methods 1456
thermal diffusivity measured by nonsteady-state cooling method 665
thermally bondable pulp. T550 blendsheet. KittyHawk. advantages 6747
thermally bonded polyester nonwovens. rewet 2691
thermally bonded. fiber morphology 6066
thermobonded nonwovens, production of fibers and web bonding 53
thermobonding, effects of moisture 5988
tribosensing used to test nonwovens 7816
Typar's polypropylene spunbond for geotextiles 8413
Tyvek from Du Pont. protective garments for decontaminators 2974
Tyvek Practik microperforated polyethylene nonwoven. protective clothing material 281
Ultraloft powder bonded nonwovens. three dimensional printing 1678
United States industry [1987] review, [1988] forecast, performance, trends 1163
United States market entry. factors to consider. costs, competition, quality, service 5147
United States patents need strengthening to protect nonwoven innovations 6404
vinyon. properties and applications 6042
viscose/polyester adhesive lining nonwovens. effects of pressing and heat 4499
viscose/polyester, viscose/polyacrylonitrile, comfort testing 315
visual cover, effect of fiber variables 6069
Vivrelle. polyoxamide fiber for use in nonwoven apparel 1643
Wacker MP for thermobonded nonwovens 5676
wastes used in nonwoven geotextiles. fabric properties 1068
water jet entangled, use in United States 3035
water repellent finishing, doubling, effects on fabric properties 6026
web forming. carding, air lay, and centrifugal dynamic processes 5982
web geometry, anisotropic. modeling 6020
WestPoint Pepperell's acquisition of Waterbury Nonwovens. products 1497
wet form nonwoven fabrics for filtration and reinforcement 4295
wet lay process, description. emphasis on stock preparation 5983
wet laying to spunbonding, review 6729
wipes. nonwoven wipes industry in United States 1069
wool and polyester blend to form nonwoven melded fabric for office interiors 1816
wound dressing. polyurethane foamed pad with porous nonwoven fibrous sheet 7748
wound dressings and plasters made from Sontara 1858
wound dressings 4273
woven and nonwoven materials used as effective barriers to bacteria 1117
woven cotton fabrics, willowing and deformation. use in nonwoven linings 4680

LLE IS AN OLEFIN FIBER.

NOVOLOID FIBERS

Kynol. flame resistant. non-melting. non-toxic 8091

NUCLEAR TECHNOLOGY, SEE TEXTILE NUCLEONICS.

NYLON FABRICS

ballistic panels. penetration by fragment simulating projectiles. mechanism 2693
Burlington's sale of Precision Fabrics division which produces various fabrics. sales details 3067
Cordura leggings, anti-snake bite 5988
drape. effect of mechanical properties on drape of silk and manmade fabrics simulating silk 1603
glove, fireman's 6239
hospital linen waterproofed with vinyl coating. gradual delamination through wear and cleaning 2065
Hydrofil, four new high performance nylon fabrics from Allied 1892

intimate apparel fabric, nylon tricot. renewed interest. company expectations 6525
leather substitute nonwoven production installed at Polish felt mill 5099
mountain climbing apparel fabric. Pertex 6 from English Perseverance Mill 2702
nylon ballistic panels. penetration by fragment simulating projectiles 2692
paper nylon packs for wool developed by CSIRO. commercial trials, pack advantages 4069
photometric method, light resistance of nylon, polyester, tests 4678
ribbon. tension levels, parameters 5033
Tactel 24 Carat from ICI Fibers 6799
thermal underwear. Stretch Dryline from Allied Fibers 8628
Toray's Altelec, triple-layer nylon fabric for outdoor applications 6800
transfer printing behavior and fastness properties of acrylonitrile grafted nylon 6 fabrics 6928
weatherproof activewear. Zefsport nylon fabric reinforced with Gore-Tex laminate 2648

NYLON FIBERS
absorbent. nonabsorbent. superabsorbent. end uses 2487
Allied Fiber's block copolymer nylon, Hydrofil, in high performance socks 3259
Allied Fibers' promotional campaign for new Patina nylon. application in intimate apparel 3281
Belima X. ultra-fine polyester/nylon microfiber from Kanebo 6516
Belseta PS. polyester and nylon blend fabric for outerwear 6738
Belseta Super. polyester and nylon blend fabric 6737
blends. nylon 6/PET polymer blends. structural and morphological features 5712
carpet industry. improved market due to recent advances in nylon. Du Pont 7340
carpet. Du Pont's Canada Carpet Fibers Group and [1988] predictions 5434
carpets. twenty denier staple. Allied Fibers 4862
cross-sectional shape. effect on lightfastness and light reflectance properties of dyed nylon 6 yarns 4058
cupric acetate and potassium salt imparts antimicrobial activity 4863
Cygnus, new nylon fiber with the touch of cotton from Kanebo and Nippon Synthetic 6526
degumming mixed silk, nylon 66 fabric 8456
development of nylon at Du Pont fifty years ago. ICI Fibres' involvement in nylon evolution 7976
DSM's Stanyl plant for production of polyamide 46 engineering plastic 2474
Du Pont's impact on hosiery industry from development of nylon in 1930's to present with Lycra 2670
Du Pont's modern hosiery mill in Camden, South Carolina, investment in nylon and Silken Sheer business 3873
Du Pont's Tynex A 612 abrasive nylon filament fibers in Kaercher BR 400 floor scrubbing machine 3282
dyeing nylon films with modified acid dyes in perchloroethane 5253
dyeing problems with fourth and fifth generation polyamide fibers 403
electrically conductive acrylonitrile grafted to nylon 902
heat of moisture sorption measured by heat transfer calorimeter 1446
history of nylon, development, inventor, impact on hosiery industry 3283
interfacial electrical properties of grafted nylon 6 fibers 6527
interlinings, new type of nylon 6 fiber 5690
Lilion nylon 6 and nylon 66 monofilaments from Snia 8092
manufacturers, United States, having good year. [1987] shipments described 4139
No Shock Nylon from Monsanto. process and properties 2451
nylon 6 fiber formation. property development 903
nylon 6 fibers. graft polymerization 7321
nylon 6 fire resistant fibers. preparation by synergistic system of combustion retarders 8093
nylon 66 and nylon 6. historical development 904
nylon 66 microfiber, Tactel 24 Carat by ICI for woven sportswear fabrics 1671
nylon 66. modified. two short fiber composites tested under stress rupture conditions 293
Piceme microfiber polyester/nylon blend composite fabric from Toray Industries 5090
pile carpet fibers. manufacture. developments 1602
polyamide 6 soft fiber, Miracle from Ems-Grilon 6522
polyamide fiber properties, industrial applications 1134
polyamide fibers. dyeing behavior influenced by amino groups, comonomer groups. chemical analysis 4438
polyamide yarn-air composite systems, heat transfer process 4864
polyamide/copolyamide. side-by-side bicomponent fibers. structure, properties 71
polyamides and steel compared in production of travelers 1698
polyamides, discovery and development of history 5681
polyamides. worldwide production, applications, and history 5680
properties of nylon 6 and 66 compared. future uses predicted 3284
property changes under action of epoxy resins 3391
Reepl. polyester and nylon fabrics from Kanebo 6755
resurgence of feminine lingerie with Tactel polyamide fibers. European lace and lingerie industries 3763
Rhone Poulenc, fiber manufacturing operation profiled 1475
Rhone-Poulenc's developmental role. new fiber Meryl 7339
staple nylon fiber, 20-denier carpet yarns from Allied Fibers. applications 5438
staple nylon fibers, twenty denier for commercial carpet application. from Allied Fibers. PerfectLuster, TraditionalLuster 4038
static and dynamic mechanical properties of nylon 66 annealed in glycerol 6528
Tactel from ICI. advantages in warp and weft knitted lingerie fabrics 5647
technological advances lead to improved sheer in nylon yarns 3285
uniformity of filaments affected by moisture content 905
union fabrics with cotton. advantages over polyester 8388
world market outlook. development of nylon 66 and 6, manufacturing processes 6529

NYLON YARN (SEE ALSO OTHER HEADINGS, SUCH AS CARPETS, HOSIERY, TIRE CORD)
carpet yarn selection. polyamide bulked continuous filament 1418
carpet yarns, stain resistant, accounted for fifty-seven percent of residential carpet sales [first quarter 1988] 5437
deterioration of nylon 6 fishing net twines after exposure to ultraviolet light 5814
Dorsett Carpet Mills. carpets made with own solution dyed nylon products 2453
draw-sizing undrawn or partially drawn nylon and polyester yarns 8140
Du Pont's Supertec Nylon 90 and Sheerspeed Nylon 289, new hosiery yarns 6530
Du Pont's Supertec Nylon 90, texturing at high speeds. industry reaction 6613
dye affinity tester FYL-500 by Toray 8696
Enka Polyamide 1000 SR with Scotchgard Stain Release 7390
friction, effects on areas on wool, cotton, nylon yarns, parameters for speed, tension 4145
India. apparel made from textured polyester and nylon yarn 5804
Kompalen-D. polyamide and acetate combined yarns. properties 8172
melt extrusion processes 4027
near-infrared determination of nylon carpet yarn heat setting method 7067
nylon 6 (Kapron). stress-strain testing of multi-ply yarns 178
nylon 6 heat set carpet yarn. tension effects. thermomechanical analysis 966
Nylsuisse nylon 6 and 66 yarns. fiber production, industrial applications 5692
Nylsuisse nylon 6 and nylon 66 yarns, test methods, fiber

properties, applications 5691
paper-wrapped nylon packs for wool by CSIRO 4069
polyamide yarn. sorption of nonionic surface active substances 3392
polyamide yarns, stability of texturing effect 4958
Raufil PVC-coated monofilament bundle yarns from Rehau 3660
solution-dyed, nylon Deltron-S from Golco Industries 4971
stuffer box machinery and texturing methods, nylon and polyester carpet yarns 164
Supertec 90, Du Pont's nylon hosiery fiber. innovative features 4865
surface antistatic treatment of polyamide yarns 4831
textured nylon 6 and 66 compared for substitution in Hungarian hosiery manufacture 8210
textured. history of production in United Kingdom by Viscosuisse 7388
unoriented polyamide yarns. treatment conditions and molecular structure 4957
yarn spun from sulfuric acid solution of a mixture of polycaproamide and polyaminobenzimidazole 4846

NYLONS
depolyamidation of polyamide waste. corrosivity of technological media with phosphoric acid hydrates as catalyst 3286
development of nylon at Du Pont fifty years ago. ICI Fibres' involvement in nylon evolution 7976
Du Pont management decided on name based on marketing considerations 5693
Du Pont research. market-driven and discovery-driven methods 3199
dyeing. silk and nylon 66 blends 5219
epsilon-caprolactam. thermodynamic characteristics 8095
fatigue crack propagation in injection molded nylon 66 reinforced with short and long glass fibers 3258
films. concentration profiles of acid dyes in foaming method 8521
fracture toughness and microstructure of injection-molded nylon 66 composites 7828
graft copolymerization of polycaproamide and polymethacrylic acid 7312
history of nylon 6. Paul Schlack and I. G. Farbenindustrie 8096
history, formation of manmade fibers industry 2475
India. effect of rising caprolactam prices 2403
India. nylon 6 production cheaper than nylon 66 production 5694
modified nylon 6. physicomechanical and spectral properties 7341
nuclear magnetic resonance. aramid-containing nylon 6 polymers 4034
nylon 6 and nylon 66. tire cord. comparison of thermo-mechanical properties 7395
nylon 6 and nylon 66. tire cords. thermo-mechanical, dynamic mechanical properties compared 7389
nylon 6. generalized mechanical properties in fiber formation 2476
nylon 66 annealed in glycerol. static and dynamic mechanical properties 1672
nylon 66 copolyamides of bis(2-carboxyethyl)methyl phosphine oxide 880
overview 3243
parachutes. use of Kevlar and nylon materials. guidelines 7533
polyamides, discovery and development of history 5681
polyamides, structural and mechanical properties 6544
polyamides. worldwide production, applications, and history 5680
polyethylene terephthalate and nylon. chain extension in extruder 3840
polymerization nylon 6. optimal reaction conditions 5695
polypropylene in functional clothing due to ability to wick moisture away from skin 4620
properties of nylon 12 compared to nylon 6 and nylon 66 during high speed extrusion 8047
rigid and flexible nylon polymers, porosity variation 4883
Ruco Leveler HUD from Rudolf. anionic leveling agent for dyeing polyamides 5193
taut-annealed nylon 6 POY. thermal and physical properties 1673
textured nylon 6 and 66 compared for substitution in Hungarian hosiery manufacture 8210
thermal decomposition of nylon 66 investigated by direct pyrolysis 906
thermo-oxidative crosslinking by torsional braid analysis for polyamides 8918
Vivrelle. polyoxyamide fiber developed by Snia and American Sun for apparel 8094
weight proportion of benzoic acid in molten caprolactam. indicator for titrimetric determination 5473
yarn spun from sulfuric acid solution of a mixture of polycaproamide and

TEXTILE TECHNOLOGY DIGEST

SUBJECT INDEX

Part 3

January-December 1988

INSTITUTE OF TEXTILE TECHNOLOGY
CHARLOTTESVILLE, VIRGINIA

© Copyright 1989 by the Institute of Textile Technology.
May not be reproduced without written permission.

The *Textile Technology Digest* is published monthly by the Institute of Textile Technology, Charlottesville, Virginia 22902, to provide abstract coverage of current periodicals, books, and patents in the field of textile technology. In preparing this annual index the staff endeavors to reflect correctly the contents of the original material. Printed in Charlottesville, Virginia, by Litho Artists, Inc. Annual subscription: $330.00.

SUBJECT INDEX

January - December 1988

In using this index, look under specific subjects. If the information wanted is not under a specific subject, look under a broader heading. Whenever possible, look under specific process. For example, information on the bleaching of cotton will be under BLEACHING: cotton (not under COTTON: bleaching). For fiber information not involving specific processes (as properties, etc.), look under the names of fibers. Use cross references and look at other headings beginning with the same word. The "see also" cross references are designed in part to limit the number of entries in the index for a given document; an abstract usually is not indexed under more than one group of headings joined by "see also" references. For many processes there will be separate headings for machines, as DRAWING and DRAWING MACHINERY.

ODOR CONTROL, SEE AIR POLLUTION, DRYCLEANING, DURABLE PRESS, FINISHING, LAUNDERING, WASTE TREATMENT--EFFLUENT, WATER.

OIL AND WATER-REPELLENT FINISHES
high polymers and copolymers, reactive properties 8542
wool fabric finishing in organic solvents 1979

OILING, SEE UNDER CHEMICAL AIDS TO PROCESSING, LUBRICATION, AND SPECIFIC MACHINERY.

OIL REPELLENCY
solvent system, Antrasol. Antarco 6131

OKSALON, SEE MANMADE HIGH TEMPERATURE FIBERS.

OLEFIN FABRICS
comfort aspects of polypropylene apparel 1355
comfort study of polypropylene knitted fabric 289
fibrid formation of polyetherurethane for artificial leather production, copolymerization, properties 4052
geotextiles. lab and field testing differences, practical modifications 7839
Mammoth Mat steel reinforced polypropylene for temporary roads 7761
nonwoven polypropylene mats for land protection during heavy construction 7791
nonwoven roll goods, polypropylene popular fabric. Frost and Sullivan report 6049
Phillips Fibers' Marvess olefin line, Ryton Sulfar fiber, Duon nonwovens. applications 72
polypropylene geomembranes as road surface dressing 7793
polypropylene needled nonwoven, production, properties 277
polypropylene. electroconductive transparent sheets from Chisso of Japan 366
Redlon polyethylene geogrids in Mexico City airport runways 7523
Reicofil process for spunbonding polyolefin fabrics 4276
sports clothing. success in central Europe, tricot knit 4379
spunbonded fabrics from polymer systems. Tyvek. Trevira. polypropylene. production methods. end-uses 7546
textiles in building and construction applications 6786
Tyvek from Du Pont. protective garments for decontaminators 2974
undergarments, polypropylene. in cold weather, comfort consideration 1312

OLEFIN FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS SPLIT FIBERS/SLIT FILMS)
carpet yarns. solution dyed olefins resist bleach, harsh cleaning agents 3005
Danaklon. production of bicomponent and polypropylene fibers for nonwovens industry 8097
manufacturers, United States, having good year. [1987] shipments described 4139
melt blown polyolefin 5669
microporous polyolefin hollow fibers. structure and properties 3287
Phillips Fibers' Marvess olefin line, Ryton sulfar fiber, Duon nonwovens. applications 72
polytetrafluoroethylene. properties and applications in marine and awnings industries 1674

OLEFIN FIBERS--POLYETHYLENE (SEE ALSO OTHER HEADINGS, SUCH AS HIGH MODULUS FIBERS)
Allied's Spectra fiber used by United States Army to reduce weight of vests and helmets 7742
ballistic armor from extended chain polyethylene fibers 4380
carbon and polyethylene fiber hybrid laminates. properties 1145
cold drawing of ultra high molecular weight polyethylene gel fibers 8100
corona technology applied to geotextiles. inline system from Matai 3564
drawing. influence on crosslinking efficiency for radiation in ultra-high molecular weight polyethylene 4064
Dyneema SK 60 super strength fiber and dirigible construction project 8098
extended chain polyethylene yarns. high strength and modulus 4059
fiber reinforced composites. plasma surface treatment 4333
gel spinning fibers from ultra-high molecular weight polymers 5665
gel spun polyethylene from Allied Signal 5642
geomembrane installed to protect pipe slippage from erosion 1129
high molecular weight. tests on physico-mechanical properties 4866
IDEA [1986]. resins, fiber grade. demonstration 4033
liquid crystalline polyethylene terephthalate. effect of extrusion temperature on structure 5696
LLDPE, mechanical behavior studied by uniaxial elongation 907
melt-blown webs. ethylene copolymers evaluated for stretch recovery 4287
nonwovens applications, monofilament and oriented tape 4289
nonwovens. growth in industrial applications 4292
oxidation behavior due to gamma radiation and ultraviolet light 8101
polyethylene glycol as viscose regeneration retardant. influence of molecular weight 8070
polyethylene surface films prepared on high strength polyethylene fibers 8102
resin, fiber grade. linear low density. processing 5697
rigid inflatable boats. USARIB design uses fabric of Spectra 900 polyethylene from Allied 2678
Spectra fiber composites. ballistic performance 4308
Spectra high performance fibers. Allied. ballistic protection 8099
Spectra polyethylene fiber composites. gas plasma treatment 4309
Spectra polyethylene fiber reinforced composite systems for high impact/microwave transparent radar domes 4310
Spectra polyethylene fibers. Allied. ballistics properties 5675
Spectra Shield ballistic protection system 5989
Tex-o-Drain filter from Texel. needlepunched polyester sandwiched around polyethylene core 6770
Toray develops superfine filament for lens cleaner 6531

ultra high molecular weight polyethylene 8126
ultra-high molecular weight polyethylene. X-ray analysis of superstructure cooled from melt state 5717
ultradrawn polyethylene. structure and relaxation processes 8688
ultrahigh molecular weight polyethylene. coextrusion drawing increases ductility 7342

OLEFIN FIBERS--POLYPROPYLENE (SEE ALSO OTHER HEADINGS, SUCH AS SPLIT FIBERS/SLIT FILMS)
absorbency and fluid properties in rayon and polypropylene air-laid needle punched fabrics 4373
absorbent. nonabsorbent. superabsorbent. end uses 2487
apparel and carpet fiber, polypropylene. care instructions, properties 7025
apparel fiber, predicted by PCA. increased use. technological advances in production 4867
applications and increased usage. highlights of Fourth International Conference on Polypropylene Fibers and Textiles 74
applications. increased in the home 3549
Barmag production processes and machinery. SSM16, FE1 spinner machine, water-bath MFE 1 spinning machine 73
blended with pineapple leaf fiber 7985
breaking during extrusion 5699
carpet backings 2000
Charpy type impact tests on injection molded short fiber reinforced polypropylene composites 7488
China's polypropylene production expanding 7226
colorfastness. solubilization of dyes during extrusion 2738
comfort and other properties 6532
composites, thermoplastic. fiber reinforced (Conf. Paper) 8038
CR type. limited shear sensitivity, swelling, tension 5698
Daltex from Don and Low. spunbonded nonwoven fabric 6801
development and growth. manufacture and properties 3290
Don and Low spunbonded nonwoven, Dal-Tex, for medical textiles 5992
Drake Fibers profile. extension includes new plant 7268
drawing process optimization for polypropylene and polypropylene blends 910
dyeing, pigmented 6879
dyeing. Sanylene F polymer melt soluble dyestuffs for fine and finest denier fibers 6111
fiber extrusion and properties 5714
filter fabrics. needle-bonded. new gas and dust filtration apparatus 6030
finishes, spin, from Schill & Seilacher 6146
functional clothing. wicking moisture away from skin 4620
gel spinning fibers from ultra-high molecular weight polymers 5665
geotextile applications, roofing industry 3034
geotextile composites of polypropylene and polyester by Akzo 1058
geotextile polypropylene liner in concrete storage tank for contaminated brine from petrochemicals 8664
geotextile polypropylene nonwoven under dike across retaining pond for run-off from coal mine 8665
heat setting. influence of temperature and length of treatment on acrylic/polypropylene yarn characteristics 7385
Hercules' 2500 denier Herculon polypropylene fiber for residential carpets 3007
image analysis of tracer fibers in nonwoven webs. polypropylene fibers used in study 5660
impact resistance of polypropylene reinforced concrete 8738
industry, West German. production and export trends 7330
integrated plants for production. ITMA [1987] exhibition 6501
IPP. whole pattern approach to structure refinement problems 3288
isotactic polypropylene extruded at varying temperatures. aging 7343
Japanese manufacturers. production and consumption data, end uses 909
Krenit. structure and properties, for cement-based materials 5684
Leolene. high tenacity multifilament yarn 5673
machinery by Noy Engineering for production. automated plants 6514
management of a small polypropylene plant, guidelines. FOY and BCF processes 2465
market growth beyond use in sports and outdoor wear. yarn production 2479
mass-dyeing fine titers. Sanylene F pigments from Sandoz 8490
mattress ticking market, popularity boom. properties, future expectations 1676
melt blowing polypropylene resins. morphology and mechanical properties 4285
melt blowing polypropylene resins 4286
melt blowing. effects of pigments 5667
Meraklon fibers from Himont Italia. fiber structure and properties. suitability for calender bonding 3289
Mirafi 500 polypropylene lines oxidation lagoon in Louisiana for treatment of wastewater 7762
molecular damage due to heat and light. stabilizing agents 5700
monofilament and film fibers 8050
multifilament fiber extrusion with cross section technique 8072
Neumag processes for spinning polypropylene filament yarn 8175
Nicolon 64109 used in construction of Alaskan road 7768
nonwoven fabrics, polypropylene use. developments from European companies 3542
nonwoven fabrics, thermal bonded polypropylene based 6067
nonwovens. growth in industrial applications 4292
partially-oriented yarn extrusion to produce polypropylene filament yarns 8067
physical properties of polypropylene. effects on economical tow and staple processing 3291
pigmented polypropylene filaments, structures and properties 4060
polypropylene fiber applications. conference summary 75
polypropylene fiber extrusion plant. priorities, guidelines, techniques 3869
polypropylene fiber production linked directly to drylaid nonwoven production 1156
polypropylene staple yarn production for nonwovens manufacture 1686
Polypropylene Textile and Fibers conference highlights 2477
processing and properties. CR type polymers 8103
production and trends, worldwide 4868
production to meet regulatory standards 3292
properties, features, performance, applications of polypropylene 1677
short spinning line, integrated, using circular heads and annular spinnerettes for production 911
slit tapes and monofilaments. production systems 8051
solution dyed yarns. background and new market successes 6533
spin dyeing polypropylene. operational process, influential factors 5221
staple and continuous filament yarn manufacture. processes and machinery 889
staple fiber. Serlene and Microlene from Sergel 1678
Synthetic Industries' new polypropylene staple fiber line. sales campaign, applications 1675
Synthetic Industries' new polypropylene staple for carpet backings. marketing 2478
thermobonding, effects of moisture 5986
Typar's polypropylene spunbond for geotextiles 8413
underwear. comfort parameters 7720
VanDernoot named president of Polypropylene Council of America 7210
world market prices. impact on jute market 2424
yarn embedded in cement matrix. maximum pull-out force values 7810
yarns. high speed processes (Conf. Paper) 8174

OLEFIN POLYMERS
branched low density polyethylene gel 5559
cellulose triacetate solutions. solvation 1637
hindered amines protect polyolefins against photooxidation 7923
hindered amines to protect against photodegradation 5701
melt blown. effects of pigments 5667
polyethylene fiber grade resins. applications in spunlacing,

spunbonding, melt blown, specialty nonwovens 64
polyethylene resins, linear low density 5697
polyethylene, extended chain. gel-spinning techniques (Abstract) 8121
polypropylene films. molecular characteristics, influence on properties of oriented films 5129
Rextex. microporous polyethylene film developed by Consolidated Thermoplastics 1056
ultra high modulus polyethylene. improved mechanical behavior by controlled crosslinking 8104
ultra high modulus polyolefins. bulk scale modification. problems in pilot scale processes 4885

OLEFIN YARN
jute/polypropylene textured yarn properties 4142
Marvess olefin, five new designer colors introduced by Phillips for commercial carpets 3004
polypropylene filament yarn. high speed spinning 4921
polypropylene filament yarns, preoriented. spinning 6554
polypropylene multifilament yarns for recreational clothing 4980
polypropylene. Hungarian knit fabric developments 8407
polypropylene. worldwide production and trends 4868

OPEN END SPINNING, SEE SPINNING--OPEN END

OPENING (SEE ALSO OTHER HEADINGS, SUCH AS BLENDING, PICKING)
bulky opened fibers by feeding through tandem aspirating jets 2505
comb bar improves blowroom action. BTRA 8153
cotton bale opening. plucking conditions and tuft weight 8166
cotton processing. unfavorable plant conditions 7988
current status and technical developments 5728
fiber damage during opening reduced using new arrangement of pins in tearing cylinder 1692
spinning. open end. effect of opening roller on tensile strength 2526
Truetzschler's Feed-commander FCT and electronic plant control RAS for spinning preparation machines 5738

OPENING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS BLENDING MACHINERY, PICKING MACHINERY, WASTE--FIBROUS)
automatic bale-opening range. Optimix II. Hergeth-Hollingsworth 8167
bale opening. plucking conditions and tuft weight 8166
bale pluckers 5739
current status and technical developments 5728
fiber damage during opening reduced using new arrangement of pins in tearing cylinder 1692
healthcare applications for spunlaced nonwovens 2618
ITMA [1987]. offerings in worsted spinning systems and yarn preparatory machinery 3323
Laroche. wool opening, cleaning, blending, and recycling machines 1694
programmable bale opener with increased production. Biendomat BDT 019 from Truetschler 8168
recycling. pin arrangement from H. Schirp in tearing cylinder to cut down fiber waste during opening 3326
short staple spinning. [1987] ITMA 1693
South Carolina mills installing updated opening, carding, and blending machinery 2508
Truetzschler fiber preparation machinery for nonwovens manufacture 3339
WRONZ Autoclean Opener. opener/duster for greasy wools 1691

OPERATIONS RESEARCH (SEE ALSO OTHER HEADINGS, SUCH AS COMPUTERS AND PROGRAMMING, FORECASTS, INDUSTRIAL ENGINEERING, INVENTORY CONTROL, MANAGEMENT, PRODUCTION CONTROL, SIMULATION, STATISTICAL METHODS)
data analysis model for computer integrated manufacturing 8812

OPTICAL BLEACHES, SEE OPTICAL BRIGHTENING AGENTS.

OPTICAL BRIGHTENING (SEE ALSO OTHER HEADINGS, SUCH AS BLEACHING)
concentrates suitable for injection into polyester spinning mass for staple fiber and filament 1192
effects on polyester dispersion dyed yarns after sun exposure 5183
examination of process. chemical action and structure. techniques 6095
fluorescent brighteners. properties and applications in textile finishing and plastics 4419
fluorescent whitening agents. comparison of Ciba-Geigy scale, visual assessment 8729
polyacrylonitrile fabrics. effect of concentration on whiteness and fluorescence 1846
wool. reaction with reactive fluorescent whitening agents 2720

OPTICAL BRIGHTENING AGENTS
detergents containing brighteners, effects on colors 7007
effects on polyester dispersion dyed yarns after sun exposure 5183
fluorescent brighteners. properties and applications in textile finishing and plastics 4419
fluorescent whitening agents in detergents. problems 2785
fluorescent whitening agents. developments. product safety. testing. photochemical behavior 3684
Leucophor BMF Liquid. fluorescent brightener for cellulose fibers 5300
opaque fluorescent materials. spectrofluorimetric measurement 3588
polymeric materials. fading in presence of optical bleaches 8106
reactive fluorescent whitening agents. results with wool 2720
Ruco-Blanc OAO. fluorescent whitening agent for acrylic and polyamide blends used in hosiery from Rudolf 5194
thiophene derivatives used as optical brighteners and disperse dyes on polyester 7554
wool. surface whitened shrink resistant cloth of improved lightfastness 2730

OPTICAL FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS GLASS FIBERS, GLASS YARNS, INDUSTRIAL FABRICS, MANMADE FIBERS)
application in testing strain and damage in woven glass epoxy composite 8731
fiber-optic splice device made of polyphenylene sulfide used for connecting ribbons 8105
light ray radiation fabric, optical fibers arranged in one side. fabric design and application 5135
Lumitex light-emitting material of woven optical fibers and acrylic plastic 4377
resins cured by ultraviolet radiation and in conjunction with fiber optic systems 7506
stress level and failure predicted using samples embedded in composites 6265

ORLON IS AN ACRYLIC FIBER.

PACKAGING (SEE ALSO OTHER HEADINGS, SUCH AS BALING, MATERIALS HANDLING)
DBM Mario Della Bella manufactures boarding and packing machines for hosiery 4225
dyestuff industry, problems of dispatching and export 1239
dyestuff. requirements and methods 1234
equipment and packaging for hosiery and men's underwear 1866
Flum's automatic packaging system for fabric rolls and bales 5534
garment packing and handling systems from various companies 3699
Hoerauf Maschinenfabrik apparel wrapping and packing systems 3925
hosiery packaging. use of photography and retro look 1865
International Hosiery Show, products and machine trends 6767
ITMA [1987]. making up and packing machinery 6185
Malimo stitchbonded packing fabric 3507

Monterey Carpets under new ownership. management restructuring, goals 7032
nylon/paper yarn packs for wool by CSIRO 4069
programmable applications system for apparel industry robots 7870
quantification of sacking material quality 3833
steel bearing drums. tamper-proofing 1543
Suberba's Type STR 402 yarn ball inspection mechanism and EMB packaging equipment 6367
Superba manufactures PEL 20 automatic ball winder and packaging 3379
underwear, men's. boxes, pack tubes, novelty greetings, photo imagery 2105
woven fabric, automated packaging machinery for finishing preparation 737

PANTS, SEE APPAREL.

PANTYHOSE, SEE HOSIERY.

PAPER (SEE ALSO OTHER HEADINGS, SUCH AS DISPOSABLES, INDUSTRIAL FABRICS, NONWOVEN FABRICS, PAPERMAKING FABRICS)
battery plate separators. Paperpower PP-20-E. Tullis Russell 8420
Constant-Extra jacquard papers from Schroers 8273
cotton plant stalks. chemical composition of different species 3213
dryer, perforated vacuum drum. Fleissner 6158
felt. uses of papermill machinery in manufacture 4271
fiber properties and tearing resistance 2233
high vacuum flow through drum from Fleissner for paper manufacture 3493
jacquard, Goldfol, from AGMueller 6652
jute pulp process developed at Bangladesh Forest Research Institute 7279
Luprintol FBT. binder and film former in transfer-paper printing with Bafixen dyes from BASF 5191
nylon/paper yarn packs for wool by CSIRO 4069
pulp and paper production from cotton plant stalk 3505
tapa. production and significance in Tongan society 1409
transverse fiber properties and in-plane elastic behavior 7547

PAPERMAKING FABRICS
Dilo Maschinenfabrik's Di-Loom PMF for Beltex papermaking felts 3491
felt needlers for papermills. innovations by Dilo, Beltex, PMF, OD-I 7475
Oskar Dilo's Beltex technology for production of machine-oriented papermakers' felts 5974
stronger flap protects press felt seam in drying 8421

PARACHUTES, SEE FABRIC PRODUCTS.

PATLON IS AN OLEFIN--POLYPROPYLENE FIBER.

PATTERNS, SEE APPAREL MANUFACTURE.

PERLON IS A NYLON FIBER.

PERMANENT PRESS, SEE DURABLE PRESS.

PERSONNEL MANAGEMENT (SEE ALSO OTHER HEADINGS, SUCH AS EMPLOYEE TRAINING, INDUSTRIAL ENGINEERING, INDUSTRIAL HEALTH AND SAFETY, LEGISLATION, TIME STUDY)
advice to mill managers on how to cope with new minimum wage law 6339
AIDS in the workplace, factors and guidelines 7916
Amalgamated Clothing and Textile Workers Union victory at J.P. Stevens' towel manufacturing plant in Drakes Branch, Virginia 3104
Amalgamated Clothing and Textile Workers Union voted in by Furtex factory workers 3105
application of flex time in textile mills 4730
bar coding system for apparel manufacture data processing 3910
computerized systems for carpet mill. BGD Computer Systems 7881
Dan River's strategy to encourage industrial engineers to create change 3110
Dowling Textile's progressive personnel programs, advantages 3697
Dundee Mills. development over one hundred years of operation, corporate philosophy 3073
effective managers. changing requirements. increased initiative, creativity, flexibility 3891
employee motivation, feedback, and involvement in planning 3892
ergonomics and employee productivity in apparel industry 5514
finishing plants. flexible management style 3098
Germany. technical apprentices. opinions on training and instruction 7980
illegal aliens report from General Accounting Office. apparel industry executives and employees respond 3896
improving employee performance in a laundry plant. proven factors in Benelux facilities 4588
incentive systems. design, implementation, maintenance 5481
Korea's labor costs increasing, industry upgrades equipment to remain competitive 5626
labor conditions in Rajasthan's wool industry. measures to improve workers' lot 7122
labor. status in Third World and industrialized nations 5600
Levi Strauss's move to a four day work week. industry reaction and company reasons for cutback 3067
modular manufacturing. concept and advantages 708
modular production units in apparel manufacturing plants, problems 3685
motivation and efficiency. factors responsible for poor worker motivation 5483
performance improvement in laundries. critical role of employee involvement 8769
Personal Best! sales incentive program for industrial launderers 8619
Quality Assurance Process, apparel industry. benefits 5485
quality control. management. knitted underwear industry 6178
Roanoke Valley union members organize union fight at J. P. Stevens towel manufacturing plant in Drakes Branch, Virginia 3106
Satellite Plus for real time production control at Lebanon Apparel 5516
sewing operators. time study of activities 5391
standards of performance, accountability for solving problems, management performance 5517
working environments for employees improved by an effective manager 7864

PHOTOCHEMICAL DEGRADATION (SEE ALSO OTHER HEADINGS, SUCH AS DISCOLORATION, LIGHTFASTNESS, WEATHERING)
acid dyes in nylon films. photodegradation 2768
Ciba-Geigy's Cibatex 4458 photodegradation inhibitor for polyamide carpet fibers 3606
dye photofading. mechanisms. recent developments. dye and pigment sensitized photodegradation of polymers 3638
polymeric materials. fading in presence of optical bleaches 8106

PHOTOGRAPHY
bacteria in raw cotton fibers. dispersal in processing 8852
photoelectric method to determine pilling resistance on woven wool blend woven fabrics 4357
VSI Video Shrink Inspector measures changes in fabric shape. optical pattern recognition 5466

PHYSICS, SEE COLOR, RADIOACTIVE TRACERS, STATIC ELECTRICITY, ULTRASONICS, ETC.

PHYSIOLOGY OF CLOTHING, SEE COMFORT.

PICKER LAPS, SEE PICKING, UNIFORMITY.

PICKING
picker lap weight variation, method of calculation to determine lap irregularity 1265

PICKING AND PICKER STICKS--WEAVING (SEE ALSO OTHER HEADINGS, SUCH AS SHUTTLES, WEFT MECHANISMS)
component wear of mechanism. polynomial for motion pattern selection 8267
PRA1 Pick Repair Automation subsystem in Picanol PAT-A air jet loom 4191
silk looms. pick movement 6662
STB draw looms, productivity, influence of weft mechanism, lay, picker 5015

PICKING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS BLENDING MACHINERY, OPENING MACHINERY)
Central Research Institute for Wool's ART-120-Sh picker, UO-Sh waste cleaner 4915
fiber mass control device for T-16 picker, design, control 4090
laboratory tests on the effectiveness of graded pickers, cotton yarn 4091
peg improvement and design effects on cleaning and opening of cotton 4092

PIGMENT DYEING AND PRINTING
AATCC printing symposium review. automation stressed 7563
Acramin system described 8529
Alcoprint system 8531
fabric handling, effect of pigment printing 5279
foaming pigment printing pastes for cotton, cotton/polyester woven fabrics 4478
gold powder 5286
khadi printing of cotton, polyester, and blends. various binders evaluated for their suitability 1240
pigment fastness improved on polyester/cotton fabrics 458
rubbing fastness of pigment prints. influence of various parameters 7629
warp knitted fabrics, surface effects through pigment printing 3643

PIGMENTS
acetoquinone and dispersol dyes. potential hazards and handling precautions 753
Alcoprint P, synthetic pigment thickener. system, products, advantages 5280
anthranilic acid. substituted hydroxy aldehydes. color and properties of pigments 7630
azo pigments from acetoacetanilide. crystal structures 8523
dye photofading. mechanisms. recent developments. dye and pigment sensitized photodegradation of polymers 3638
extrusion polymer coloring concentrates, quality pigments and dyes 3266
foaming pigment printing pastes for cotton, cotton/polyester woven fabrics 4478
inorganic pigment production [1985-1986] in Japan 8524
monoazoaceto acetanilides and disazoaceto acetanilides. color properties 7631
monoazoacetoacetanilides. color and molecular structure. relationship 1951
opaque fluorescent materials. spectrofluorimetric measurement 3588
organic pigment production [1985-1986] in Japan 8525
Pigment Yellow G583 (C. I. Pigment Yellow 6). misclassification 3639
polypropylene filaments, structures and properties. color master batch 4060
printing, colorpaste preparation in laboratory, automatic 5283
reflectance computed from size and refractive index of paints using multiple-scattering technique 6923
safety practices and industrial hygiene 754
spray drying 2705
textile dyes and pigments. potential hazards and handling precautions for cuprodiazol, diazol, procilene PC 755
viscose fibers with carbon black as pigment or as electrical conductive material 3317

PILE FABRIC FASTENERS, SEE FASTENERS AND TRIMMINGS.

PILE FABRIC LOOMS
Cavel installs double rapier looms to produce velvet. MPS-22 and MPS-32 2627
double bar velours raschel machine RD 7 DPLM 12-3 EBC/EAC, seven guide bars 1008
Model 14 122 Liropol pile warp knitting machine from VEB 8324
rigid. rapier. Model VMe and VMm22 double velvet loom from van de Weile 8276

PILE FABRICS (SEE ALSO OTHER HEADINGS, SUCH AS CARPETS, FLOCKING, TERRY FABRICS, TUFTED FABRICS, WEAVING, WIGS)
Cavel installs double rapier looms to produce velvet. MPS-22 and MPS-32 2627
color measurement. human perception of value and chroma differences 1459
construction and durability of carpet pile. effects of denier 6645
Conti hosiery knitting machines. plush fabric and false rib hosiery 3460
cotton corduroy fabric woven on air jet loom. influence of filling yarn characteristics 1012
Di-Lour system from Oskar Dilo for needle punched fabrics 8334
drycleaning procedures. effects of moisture on surface and color 6999
dyeing and printing of velvet fabric samples. results 6869
jacquard plush fabrics 8351
Liba Maschinenfabrik's Copcentra, Racop and Weftloc warp knitting and double bar raschel machines for pile fabrics 4258
nonwoven products [1988]. compositions, uses, production methods 5150
Optima series pile shearing machine from Vollenweider. used by Grober in high pile knitting operation 4261
peach skin-type fabrics from Teijin, Kanebo, Kuraray 8390
peach skin-type fabrics. Savina PS from Kanebo 8389
plush fabric on Diamant FR1 flat knitters. fabrics and methods 4240
polyester nonwoven pile fabric. Stratos from Foss 2690
rug weaving. origins in Middle East and Scandinavia 1406
single jersey loop pile fabrics produced from cotton pile. dimensional properties 1170
single jersey loop pile fabrics. linear and area dimensional properties 1171
sinking, double. technique for pile and suede knits 5051
stitch-knitting in loop-pile fabric manufacture 8297
Sucker and Mueller. continuous finishing line for pile fabrics 6958
visual and tactual sense values of pile fabrics, equations 7082
weaving of roller printed yarns 5289
weft velvet. finishing to produce high quality fabric 4296

PILLING (SEE ALSO OTHER HEADINGS, SUCH AS IDENTIFICATION, FABRIC DEFECTS, INSPECTION, FABRIC QUALITY, FIBER QUALITY)
Azapil photoelectric testing device for knit fabric pilling determination 4351
computer image analysis of pilling features 8706
correlation of pilling test methods to develop international standard 7085
CSIRO research on pilling formation and release, influence of fiber density and structure 4378
fabric pilling. definition, causes, how to avoid 6802
fiberfill pilling due to nonwoven fibers in the filling material 7008
low twist yarns, temporary solution for drycleaners 5396
photoelectric method to determine pilling resistance on woven wool blend fabrics, formula 4357
polyurethane and coating applications. production 7660
studies on apparel 6754

Vollenweider AG Textilmaschinenfabrik's Pyrotrop singeing machine for knit fabrics. pilling resistance 2732
wool, wool blend woven women's apparel fabrics, pilling tests, suggested changes in standard 4359
wool. humidity and pilling 8744

PIMALON IS A NYLON 66 FIBER.

PIN DRAFTING, SEE GILLING.

PIRNS, SEE BOBBINS, WINDING MACHINERY, YARN PACKAGES.

PLASTICS (SEE ALSO OTHER HEADINGS, SUCH AS COMPOSITES, ELASTOMERS, FILMS, FOAMS, LAMINATES, MANMADE FIBERS, AND UNDER SUBJECT HEADINGS OF SPECIFIC MATERIALS SUCH AS NYLONS, POLYESTERS)
3-D braided commingled carbon fiber/PEEK composites 4302
advanced polymer composites for specialized performance products 4311
aerospace plastics. impregnating system. Caratsch 5968
biodegradable plastics. research and development 8422
carbon fiber reinforced composite laminates with PEKK matrix. properties 6546
carbon fiber reinforced composites. fracture characteristics 7491
carbon fiber reinforced PEEK. experimental autoclave for polymeric diaphragm forming of thermoplastics 4269
carbon fiber reinforced plastic laminates. chemical resistance. comparisons with glass and nonwoven polyester veils 5109
carbon fiber reinforced plastics. increased damping by short fibers or matrix with high dissipation 5969
carbon fiber reinforced polyether ether ketone laminates. temperature distribution and thermal cycling 7470
Carbon/PPS and Carbon APC-2 thermoplastic materials. compression strength after impact 4303
carpet backings, polyurethane. Lintafoam 5431
Catlux, thermoplastic fiber from Luxilon, X-ray detection fiber 5642
composites by Adzel combining glass fiber structure and thermoplastic matrices 8374
continuous polyether ether ketone/carbon fiber reinforced thermoplastic composites. flow processes 4317
Directory [1988]. products, tradenames, suppliers 1838
discontinuous fiber reinforced thermoplastic composites 4318
double belt press. consolidation fiber reinforced thermoplastics 5101
DSM's Stanyl plant for production of polyamide 46 engineering plastic 2474
electronically conductive fibers in a form of plastic, Lode Soens of Belgium. material properties 1893
elliptic rings of carbon fiber reinforced thermoplastics. spring constants 4319
fiber reinforced plastic pipes. high fiber content in centrifugal forming 8423
fiber reinforced plastics. transport applications research 367
fiber reinforced thermoplastic injection molding, effect of weld line on strength 1085
fluoroplastic fibers. manganese dioxide dispersions in formaldehyde with surface active agents 8062
fracture surface analysis of carbon fiber reinforced polyether ether ketone composites 767
glass fiber reinforced 5663
graphite fiber/polyether ether ketone. effects of lamination process cooling rate 4325
high performance sandwich panels from resin impregnated braided tubes 4327
knit-lines in short fiber reinforced plastics. impact fracture mechanics analysis 7344
Kodaflex trioctyl trimellitate. primary plasticizer for vinyl (Trade Lit.) 8575
Lantorine. aluminum nonwoven surfacing tissue 5996
Lorica. polyurethane-based leather substitute 6046 6047
modified with inverse gas chromatographic methods. surface interaction with silanes 8107
orthotropic square plates made of fiber reinforced plastics. natural frequencies 8739
Perkins-Duffy new slitter/rewinder line, Eagle C-2, for plastic film and converting 2493
personal protection basket of fiber reinforced plastic 4332
phenolic fiber reinforced thermoplastics. temperature dependence of dynamic properties 8424
polybutylene terephthalate. properties, applications, and prospects 6545
polyether ether ketone and polyether imide fibers from Teijin 4879 4880
polyether ether ketone, polyether imide, and polyphenylene sulfide fibers from Teijin 4881
polyether ketones, aromatic. properties and applications 5683
polymer films, fibers, and plastics in home furnishings 6507
polymer materials. components and effects of substitution for natural materials 4751
polyphenylene sulfide composites. filament winding and mechanical performance 4335
polyvinyl chloride plastisols. rheological properties 3305
PVC-plastisols. viscosity behavior on softening pastes 8558
radio frequency heat sealers for joining thermoplastic film or sheet materials 3487
reinforced thermoplastics. enhanced interfacial adhesion between matrix and fibers 7311
reinforced. market predictions in report from FIND/SVP 4338
roof sheeting materials. quality indicators. standardization tests. long-term behavior 329
short aramid fiber reinforced thermoplastic composites. improved wear resistance 2643
symposium for impact testing of plastics, composites. research papers 7243
technologies discussed at AICE colloquium 6365
thermoplastic amorphous polyimide resin, JD 861, by BP Advanced Composites 1051
thermoplastic composite part formation. tension 4340
thermoplastic composites based on PEEK and PEI for primary aerospace structure 4341
thermoplastic filament winding. heat transfer, heat flow phenomena 5111
thermoplastic matrix of polyether ketone ketone in carbon fiber reinforced composites. evaluation 7508
thermoplastics with tack. fabric production methods 5987
thermoplastics. advantages when compared with thermoset resins 3511
tubes, vascular prosthesis. electrostatic spinning of polyurethane 5990
ultra high molecular weight polyethylene 8126
ultrafine high performance yarns for thermoplastic prepregs 4073
van der Paw measurements of resistivity in plastic/metal composites 6308

PLEATING, SEE CREASING AND PLEATING.

PLUSH FABRICS, SEE PILE FABRICS, TERRY FABRICS, TUFTED FABRICS.

PNEUMATIC CONTROL SYSTEMS, SEE AUTOMATION, DRIVES, ELECTRICAL EQUIPMENT, MONITORING SYSTEMS, TENSION CONTROL DEVICES, AND UNDER SUBJECT HEADINGS OF SPECIFIC MACHINERY.

POLIFEN IS A FLUOROCARBON FIBER.

POLLUTION, SEE AIR POLLUTION, DETERGENTS, SURFACE ACTIVE AGENTS, WASTE TREATMENT--EFFLUENT, WATER.

POLYACETAL FIBERS, SEE MANMADE FIBERS.

POLYACRYLONITRILE FIBERS, SEE ACRYLIC FIBERS.

POLYAMIDE FIBERS, SEE NYLON FIBERS.

POLYAMIDES, SEE NYLONS.

POLYBENZIMIDAZOLE FIBERS, SEE UNDER THE SUBJECT HEADING OF MANMADE HIGH TEMPERATURE FIBERS.

POLYCAPROAMIDE FIBERS, SEE NYLON 6 UNDER THE SUBJECT HEADING OF NYLON FIBERS.

POLYCAPROLACTAM FIBERS, SEE NYLON 6 UNDER THE SUBJECT HEADING OF NYLON FIBERS.

POLYCHLAL FIBERS, SEE UNDER THE SUBJECT HEADING OF MANMADE FIBERS.

POLYCHROMATIC DYEING, SEE PRINTING.

POLYCOLON IS AN OLEFIN--POLYPROPYLENE FIBER.

POLYCRON IS A POLYESTER FIBER.

POLYESTER FABRICS

acetate in textile linings. possible alternative to rayon, home furnishing, apparel industry 4051
alkaline saponification rates, testing and results 6273
antistatic agents, polyethylene oxide condensate. BTRA 6935
antistatic finish by plasma graft polymerization and ionization 1962
binding polyester nonwovens with resin powders applied by spray gun 274
Blacky of Switzerland producing apparel for cyclists 2550
Bonar Carelle nonwoven polyester fibers bonded with polyester powder 3293
Burlington's sale of Precision Fabrics division which produces various fabrics. sales details 3087
comfort properties. methods of improvement 3575
comfort. improving with fiber engineering, topical finishes, caustic soda treatment, and amination 368
condensation temperature and formaldehyde release in durable press cotton and polyester fabrics 8557
contract furnishing prints on flame retardant Trevira CS twill weave. new range 2695
crepe treatment by caustic hydrolysis 3665
drape. effect of mechanical properties on drape of silk and manmade fabrics simulating silk 1603
drying performance test with slightly alkaline water and thymolphthalein indicator 8712
EniChem technical fibers and textiles. uses in firefighting, automobiles 4068
Enka's Sympatex fabric. sealed polyester ether membrane, for sports and leisure apparel 2480
Exclusivas range for reducing weight by caustic soda treatment. improves hand, strength, and dyeability 5305
finishing, using alkaline hydrolysis with catalysts 476
finishing. processing sequence for both knit and woven fabrics 6820
flax. chemical modification in polyester blend fabrics 5152
Freudenberg's Lutradur spunbonded polyester laminated by Xiro process 1412
future in apparel. fancy, twist, and flame retardant innovations 8217
geotextile mats. chemical and damage resistance, creep. limiting factors to load bearing for soil stabilization 7528
gravel-filled bags for railroad sleeper beds. performance under field conditions 7792
heatsetting, irregularities in microstructure 1988
Hoechst Celanese's Trevira lines, apparel, carpets, flame retardant fibers, home furnishings, and spunbond products 76
innerwear, women's popular fabric with designers 4605
Japanese flame retardant fibers and fabrics, end uses. treatment of polyester and cotton for flame retardant fabrics 3529
knit. heat and moisture transfer properties (Conf. Paper) 8707
linings for men's wear, fiber producers offer view of market situation 3294
medical application suitability of wool and polyester knit fabrics 3537
melt blown. Exxon process. properties and applications 6061
nonwoven filters. denier blends versus filtration and air flow 8347
nonwoven roll goods. polyester main fabric. Frost and Sullivan report 6049
nonwoven, as roofing membranes. strain energy failure models 6040
nonwovens, rewettability of thermally bonded. polyester staple 5999
P. Kaufmann's group of Trevira for FR prints coordinated with Trevira solid color chintz. fabric properties 1894
photometric method, light resistance of nylon, polyester, tests 4678
plasma treated, dyeing and deep shade properties tested 4468
plasma treatment of polyester fabrics 5332
polyester and wool. aging and annealing behavior described with stress relaxation curves 8717
polyester/ramie blended fabrics. Ramzay finishing agent to control itchiness 2790
polyurethane/polyester fabric carpet backing systems, the Enhancer Plus and Eze-Release 2156
prosthetic device made of polyester fabric, which integrates into surrounding tissue 5136
prosthetic ligament woven without selvages to eliminate irritation 1855
recommended discharge and resist chemicals 3641
Shirley Institute's conference on polyester textiles, papers 6534
soil repellency. plasma etching method 6945
soiling and soil removal, residual soil studies with electron microscopy 582
spectrophotometric measure of grafting acrylic acid into polyester fibers 4877
sports clothing. success in central Europe, tricot knit 4379
spun-colored polyester pile fabric. Stratos from Foss 2690
stretch, innovations. Celanese's ESP polyester 305
Sympatex breathable waterproof membrane from Akzo 8425
Sympatex from Enka. watertight, windproof, breathable membrane 2694
synthetics market expanding in home fashions 7040
tactile test promotion by the Polyester Council to improve image of polyester fabrics 6071
tamarind gum as thickener in printing polyester fabric 3651
technology. examined for production, processing, end uses 8939
Terital Silklike. easy care fabric with variable appearance, hand, drape 8426
Terylene safety net protects against flying window glass. Monarch Textiles 8404
textiles in building and construction applications 6786
Textolite production, replacing cotton bases with polyester woven fabrics 369
textured. defects caused during wet processing 6163
thermally bonded polyester nonwovens. rewet 2691
thermally bonded. fiber morphology 6068
Trevira Finesse high tech fabric from Hoechst. water impermeable qualities with no coating 6070
Vaporloc from Mather Machinery. pressure scouring 5185
vascular graft developed by Meadox Medicals 1857
Viscosuisse knit polyester fabrics for functional sportswear and travel apparel 5417
wet processing developments 8434
wicking ability of polyethylene terephthalate fabrics enhanced by plasma polymerization of nitro compounds 7548
woven. Polish lifeboats, carrier fabrics. after-gumming 1766

POLYESTER FIBERS

acrylic and methacrylic acids grafted on polyethylene terephthalate 1658
Allied Fibers expands industrial polyester capacity 807
amine and alkali-treated fibers. hydrophilic properties 4061
antibacterial waddings. polyester fiber impregnated with zeolite 7478

applications in Pakistan. blending, spinning 8947
Belima X. ultra-fine polyester/nylon microfiber from Kanebo 6516
Belseta PS. polyester and nylon blend fabric for outerwear 6738
Belseta Super. polyester and nylon blend fabric 6737
bicomponent yarns with different staple length. properties of cotton/polyester yarn during spinning 3821
blend fibers. kinetics and mechanism of alkaline hydrolysis 8108
blends designed to replace down 886
carpet. Du Pont's Canada Carpet Fibers Group and [1988] predictions 5434
carrier dyeing polyester fibers 2748
carriers. effect on dyeability of PET 1651
chemical compatibility for printing 385
chemical stress cracking of polyethylene terephthalate fibers 5702
coagulated PBT fibers and films. microfibrillar morphology 2484
comfort. modifications, techniques (Conf. Paper) 8033
composites, thermoplastic. fiber reinforced (Conf. Paper) 8038
cracks in polyester fiber. chemical action of spin finishes 6556
Dacron converted into highly resilient, tiny balls for filling material 7945
developments and advanced technology. advantages of synthetics 2473
disperse dyes for polyester fibers best in rapid dyeing systems 5268
Du Pont increases polyester capacity by fifteen percent 6343
Du Pont's expansion plans for Dacron polyester fiber production, improvements 2490
Du Pont's plans to modernize Dacron production, main goals 3111
dye test for characterizing fiber surfaces. alkali treatment 4656
dye, disperse, application from aqueous bath. computer simulation 459
dyeing before extrusion 7346
dyeing, disperse. thermomigration 6881
dyeing. substituted diamino-2-methoxy anthraquinone dyes. fastness properties 2739
European manmade fiber producers await decision on dumping of imported polyester 4851
extrusion at high and low speeds. relation of amorphous and crystalline areas 8109
extrusion, partially oriented, and draw-textured yarn production in Pakistan 8069
fire retardant fibers. nonwoven applications from EniChem and Rhone-Poulenc 1657
flame retardancy through polymethacrylic acid 6523
Fleissner introduces processing concept. benefits 2481
grafting acrylic acid into fabrics of polyester fibers 4877
HDPE/PET. orientation stretching 8023
heat setting polyethylene terephthalate fibers 5703
Hoechst Celanese's Trevira lines, apparel, carpets, flame retardant fibers, home furnishings, and spunbond products 76
hollow fibers. microvoid development from alkaline hydrolysis 8110
hollow fibers. void morphology after treatment with sodium hydroxide 5704
industry, West German. production and export trends 7330
integrated plants for production. ITMA [1987] exhibition 6501
manufacturers, United States, having good year. [1987] shipments described 4139
market will be strong [1998] executives predict 6515
market, world, position. properties, and end uses 8114
melt spinning of aromatic fluid crystalline polyester 6553
melt spinning. improvement of properties for better tire cord (Abstract) 8065
microfibers used by Savina-Belseta and Asahi Chemical Industry for leather substitutes, filters, and apparel 4869
Pakistan fiber industry 8944
PBT. microfibrillar morphology. SAXS 2483
PET fibers. affected by heat setting. crystallinity, birefringence, stress-strain behavior, thermal shrinkage 7384
PET fibers. effects of heat setting on crystallinity, birefringence, stress-strain behavior, mechanical properties 7331
Piceme microfiber polyester/nylon blend composite fabric from Toray Industries 5090
plasma etching changes structure of polyacrylonitrile fibers 5645
polybutylene terephthalate. comparison to polyethylene terephthalate after ultrahigh-speed extrusion 8111
polyester/viscose blend yarns evaluated 6611
polyethylene terephthalate fractionation. polymerization and spinnability 8120
polyethylene terephthalate waste 5705
polyethylene terephthalate, necking behavior during high speed extrusion 6552
polyethylene terephthalate. flow behavior and spinning conditions relative to temperature 908
polyethylene terephthalate. nucleating reagent added during high speed melt spinning 7347
polyphenylene terephthalate. dry jet wet-spinning 7357
polyphenylene terephthalate. optimal extrusion conditions 5650
PPTA fiber modified via ultrasonics. mechanical properties 7538
pre-carding and pre-draw-frame blending of polyester/cotton blend yarns 8146
producer colored. Eastman and Kanebo joint marketing 4860
property changes under action of epoxy resins 3391
quick spun. influence of spinning speed during false twist crimping 4030
reinforced thermoplastics. enhanced interfacial adhesion between matrix and fibers 7311
Respi. polyester and nylon fabrics from Kanebo 6755
resurgence of polyester in fashion fabrics, causes 6535
Sanyo chemical agents to improve dyeability 5197
short spinning line, integrated, using circular heads and annular spinnerettes for production 911
silk-like polyester fibers. production methods 3267
staple. domestic shipments for [1987] increased by six percent 894
tensile deformation and fracture behavior 5706
testing density. influence of staple plugs 6502
testing. density with Shirley Fineness Maturity Tester. other methods 6503
thermal bonding procedures using polyester fiber and adhesives 4293
thermal properties and heat treatments of polyethylene glycol terephthalate 1679
thermotropic 5708
thiophene derivatives used as optical brighteners and disperse dyes on polyester 7554
tire cord. development of HMLS fibril-to-fibril chains by Hoechst Celanese 8211
ultrahigh modulus filaments. aromatic copolyesters and polyethylene terephthalate co-p-oxybenzoate 7323
visual cover, effect of fiber variables 6069
waste converted for textile applications 7199
waste depolymerized for possible use as resin showed no film forming properties 6536
water soluble copolyesters as antistats for Lavsan fiber 3656
Wellkey hollow fiber by Teijin. absorbent and rapid drying 7345
Wistel polyester monofilament from Snia 8092
world outlook. influential factors 806
worldwide production [1987] 5640
Xydar liquid crystal polyesters, high performance fibers. Allied and Dartco 912

POLYESTER YARN (SEE ALSO OTHER HEADINGS, SUCH AS CARPETS, TIRE CORD)

Barmag draw warping and draw sizing machinery for polyester yarns 8135
comparison of weaving yarns for elasticity, break resistance, degradation 8208
copolyester. structural, physical extension stress compared to polyester 8112
cotton/polyester blend yarn with improved tensile properties 8173
Diolen special effect polyester filament yarns and their use in knit fabrics 3048
Dorlastan. segments of polyester 5815
draw-sizing undrawn or partially drawn nylon and polyester yarns 8140

dye affinity tester FYL-500 by Toray 8696
dye uptake testing. Toray FYL-500 continuous affinity tester 8700
effects of optical brighteners on polyester dispersion. dyed yarn after sun exposure 5183
Epic sewing thread by the MEZ company. factory-based cotton and polyester yarn spinning facilities 3322
European manmade fiber producers await decision on dumping of imported polyester 4851
extrusion machine for micro-denier POY polyester filament yarn offered in United States 8197
extrusion, partially oriented, and draw-textured yarn production in Pakistan 8069
filament yarn. importance of careful sizing 7405
filaments. thermoanalytical measurement and structural characterization, prediction of dyeing behavior 8704
future in apparel. fancy, twist, and flame retardant innovations 8217
heat setting. influence of variables on iodine absorption 6605
heat treatment. effect on polymer supermolecular structure of polyester yarns 83
India. apparel made from textured polyester and nylon yarn 5804
India. polyester filament yarn production 7267
ITQT Digital Hairiness Meter. diameter and hairiness. comparison 3389
manufacture of industrial yarn. optimizing with Rieter J 3/10 draw-winder 8141
market, world, position. properties, and end uses 8114
melt extrusion processes 4027
multifilament, interlink effect. nomenclature and characterization 8212
neps from rotor spinning. classification 8693
performance and new product esthetics counter higher costs, imports, negative image 8213
PET bristle used as a model for fatigue and wear of tire cord 8698
polyester yarn beams, fully oriented yarn. Karl Mayer technology 8247
polyester, shrinkage increased in the drawing stage, decreased in the finishing stage 4896
preoriented polyester yarns, structure and dyeing 4028
production costs. mill restructuring, technology 8749
Raufil PVC-coated monofilament bundle yarns from Rehau 3660
Rhone-Poulenc produces Setila. silk substitute 7348
sewing thread. physical, chemical, dye properties 3307
sewing thread. replacement of cotton, emergence of air-textured yarn 8214
shrinkage variation obtained by varying temperature of heating roll on stretching apparatus 171
stuffer box machinery and texturing methods, nylon and polyester carpet yarns 164
Teijin's Delite middleweight polyester worsted type yarn 4972
Terital filament from Montedison. production, silk-like fabric applications 8215
Tersuisse polyester yarns, test methods, fiber properties, applications 5691
Tersuisse polyester yarns. fiber production, industrial applications 5692
thread, air entangled. preventing seam breakage during aftertreatment of jeans 1349
tire cord. development of HMLS fibril-to-fibril chains by Hoechst Celanese 8211
Trevira polyester gaining in residential carpet market, stain resistant quality, promotions 6252
Unifi textured polyester production. company profile 2240
VM size for polyester filament 2566
Wistel from SNIA Fibre. specialty modifications in polymer, spinning, processing stages 8216

POLYESTERS

Celanese copolyester. flow instabilities 5707
copolyester. structural, physical extension stress compared to polyester 8112
copolyesters. trans-4,4'- stilbenedicarboxylic acid, effect on thermal, rheological, plastic and fiber properties 3297
copolymer modification for structural, batting purposes 8043
Du Pont modernizes and upgrades Dacron staple and filament polyester capacity 3090
dyeing operations. quality control 413
dyeing. disperse dye bath preparation. developments. testing and results 6112
Fiber Industries acquires Fortrel trademark and Celanese plants 1660
Fiber Industries. Fortrel 3107
flammability testing standards. need to upgrade to make test results more relevant 8719
formulations other than PET. Kodel 2, PIMT, PEOB, undeveloped formulae reviewed 8113
fracture behavior of E-glass/polyester composite crack arrestor 6009
future in apparel. fancy, twist, and flame retardant innovations 8217
geotextile applications, roofing industry 3034
glass fiber reinforced polyester laminates. fatigue damage 8735
Japanese polyester film manufacturers expand programs 77
liquid crystalline polyethylene terephthalate. effect of extrusion temperature on structure 5696
Lutradur. polyester spunbond used to reinforce polyurethane in construction of automobiles 2482
market, world, position. properties, and end uses 8114
mesophase transitions in model liquid crystalline polyesters studied by synchrotron radiation 4694
optical whitener concentrates for injection into polyester spinning mass for staple fiber and filament 1192
PET modified with PBT. sequential melt-blending and spinning 4053
polybutylene terephthalate. properties, applications, and prospects 6545
polyester, polyamide, and filament rayon textiles. industrial applications, fiber properties and industrial projects 1134
polyesteramide synthesis 1680
polyethylene terephthalate and nylon. chain extension in extruder 3840
polyethylene terephthalate films. effects on uniaxial and biaxial extension on intrinsic fluorescence 2485
roofing materials, from organic felts to spunbond polyester 4645
segmented polyester/urethane polymerization. exchange reactions 8125
semi-flexible liquid crystal polyesters melt spun into highly oriented fibers 65
solid-state polymerization plant developed by Buehler for Sunkyong Fibers for production of bottles 8115
Terital filament from Montedison. production, silk-like fabric applications 8215
Tex-o-Drain filter from Texel. needlepunched polyester sandwiched around polyethylene core 6770
thermal bonding of nonwovens. grows in popularity at the expense of resin bondings 6714
thermograms. effect of oligomers 6537
thermotropic aromatic copolyesters. synthesis and properties 5709
thermotropic aromatic polyesters examined by x-ray diffraction. structure 7349
thermotropic fibers and moldings 5708
Transilon conveyor and processing belts from Siegling. coated with polyester for resistance to solvents 5295
trends spun polyester products, stretch products, spandex, stretch nylon, rayon 4056
Trevira CS and flame retardant copolymers 8052
unsaturated polyester resins and laminates. reduction of optical density of smoke during burning 3961
Wistel from SNIA Fibre. specialty modifications in polymer, spinning, processing stages 8216
wound dressings and plasters made from Sontara 1858
woven, use in carpet backings 2000

POLYETHYLENE FIBERS, SEE OLEFIN FIBERS.

POLYETHYLENE TEREPHTHALATE FIBERS, SEE POLYESTER

FIBERS.

POLYIMIDE FIBERS, SEE MANMADE HIGH TEMPERATURE FIBERS.

POLYMERS AND POLYMERIZATION (SEE ALSO OTHER HEADINGS, SUCH AS CROSSLINKING, ELASTOMERS, GRAFTING, MANMADE FIBERS, PLASTICS, AND UNDER HEADINGS OF NAMES OF SPECIFIC POLYMERS AND FIBERS)
acrylic polymers backcoating emulsions 8352
advanced polymer composites for specialized performance products 4311
amorphous and crystalline polymers from ICI. high performance for world-scale manufacture 4873
anisotropic features, flexural moduli, and fibrillation of polyether esters 8117
anisotropic polymeric fibers. refractive index distribution 897
antibacterial fiber. Bactekiller 866
antistatic properties in apparel-grade polymers 3272
aramids and polyarylates with perfluoro-substituents on benzene ring. synthesis and properties 6386
Asahi/Chuo coil spring made of highly stretched polyacetal fiber 1681
asphalt mixes containing reinforcing fibers of linear alternating polyketone polymers to prevent shrinkage 5141
basic dyes. aggregation in aqueous solution in presence of polyelectrolytes 460
biomaterials. surface structure and biocompatibility 3311
blend matrix polymer with crystalline polymer to synthesize polymer fibers 4874
blends, structural and morphological features of nylon 6/PET polymer blends 5712
blue wool sample for weathering testing of polymeric materials. relative humidity problems 7095
caprolactam polymerization in presence of an acid ester of polyethylene glycol and phosphoric acid. kinetic principles 78
carbon fiber reinforced polyether ether ketone. fracture behavior 8427
carbon fiber reinforced polyfurfuryl alcohol composites pyrolyzed to carbon/carbon composites. properties 6003
cellulose derivatives. lyotropic liquid crystalline order 79
ceramic fibers produced by conversion of silicon backbone inorganic polymers 4050
characteristics of flexible-chain polymers 6538
chemical structure and properties 4063
chitin nonwoven manufactured by resin bonding with polymers 5137
closed loop recycling system using ultrafiltration to separate polymer sizing and purity effluent 8445
coating fabrics with polyurethane. substrate, method, history, chemistry 4484
composite fibers based on flexible-chain polymers. limiting value of elastic modulus 3273
composite materials, adsorption of polymers at interface 6744
composite with J-1 polymer matrix reinforced with Kevlar. crystallization and processing behavior 8730
composites. interface properties. fiber-polymer 3517
conductive, piezoelectric, and high performance. Symposium on Polymers for Advanced Technologies 8040
continuous laminates based on polyphenylene sulfide 980
continuous, batch, and semi-continuous polymerization and spinning processes 8118
control of polymerization in thermal treatments. new methods. efficiency 6960
copolyesters. trans-4,4'- stilbenedicarboxylic acid, effect on thermal, rheological, plastic and fiber properties 3297
copolymers of rigid and flexible macromolecules, process 3298
core-shell emulsion polymerization to prepare coating agents 1981
Courtaulds Focus Polymer. introduction of new Actipore products 4042
crystallization under tension. early stages 4876
development and characterization 6539
developments in formulating highly oriented polymer materials (books) 7301
developments in oriented polymer, properties, and spinning behavior 6541
developments in polyurethane products and applications 3299
developments, high tech applications 6540
diffusion coefficient of dye in polymer substrate 6924
dimethylacetamide solutions of polyamic acid polymers extruded. wet spinning 7326
dispersions. thermoplastic and thermosetting polymers. dispersion mixtures and parameters 3300
drawing. influence on crosslinking efficiency for radiation in ultra-high molecular weight polyethylene 4064
dye and pigment sensitized photodegradation of polymers 3638
dye, cationic, sorption by oxycellulose and acrylic polymer fibers 449
EDANA Nordic Nonwovens Symposium [1988]. technology, fibers, markets. superabsorbent polymers 6621
emulsion polymer binders for nonwovens from three monomers. performance advantage 286
emulsion polymers. simultaneous incorporation of salts of itaconic acid and hydroxyesters 46
enzyme-containing fibers with milk-coagulating activity 80
ethylene copolymer resins. melt blown webs 5668
ethylenimine, polymerization onto woody fibers, effect of corona pretreatment 81
extrusion of nematic liquid crystalline fiber. highly oriented fiber without drawing 6510
fabric finishing. polymer coatings produce thermally active fabrics. changes in cellulose after treatment 7642
fatigue behavior of PET tire cords, degree of polymerization and twist 1449
Favor-C polymers from Chemische Fabrik Stockhausen 7043
Fiber Industries purchases Celanese plants, Fortrel trademark 4701
Fibersorb superabsorbent nonwoven web. nonacrylic-based resin 6016
film, Tedlar from Du Pont. polyvinyl fluoride for awnings 6760
finishes, spin. polyalkylene glycols as additives 5635
glass fiber reinforced polymers. controlling materials and molding conditions to produce smooth surfaces 8333
glass fiber reinforced polymers. resin formulation effect on surface appearance 2645
graft polymerization of vinyl monomers initiated by carbon black 5560
graft polymerization of viscose to cellulose during spinning. anion-exchange properties 99
graphite and polyetheretherketone composite thermoplastic systems in three dimensional weave geometry 981
graphite reinforced thermoplastics. failure studied for static and fatigue loadings 7499
Haver and Boecker wire filter for polymers 8394
heat treatment. effect on polymer supermolecular structure of polyester yarns 83
high performance polymer fibers, films, plastics in the home 6507
high performance polymer matrix composites. deterioration in aerospace environments 7500
high performance polymers by varying feed polymers (Conf. Paper) 8036
high pressure liquid jet cutting of polymers. tests and parameters 6980
Hoechst Celanese produces polyetherimide filaments for heat and fire resistant composites 5630
hydrophilic vinyl compound to replace Plaster of Paris bandages 3302
industry. Monsanto's sale of Hale Manufacturing assets to Polymer Corporation 3885
interlaminar crack growth and polymer matrix in composites 7310
ionic surfactants and polyampholytes formations, and ionic surfactants and synthetic polypeptides formations 915
IROS-100 from Automatik. on-line quality control system for molten polymer processing using infrared analysis 8116

isotropic and drawn poly(vinyl alcohol) dried gel films. alpha-relaxation 8733
Kimberly-Clark obtains patents for processes and products involving thermoplastic elastomeric polymers 2458
kinetics of melt polycondensation of bisphenol-A diacetate and isophthalic acid 6387
laminates. high performance. deformation and failure processes. matrix dominated behavior 7501
latex polymer bonding in nonwovens to improve strength and durability 4283
lattices prepared with alkali activated crosslinking function yielding formaldehyde-free polymers 84
linear oligo-tetrafluoroethylenes. property dependence on molecular size and physical state 4772
liquid-crystal forms of Kevlar. German Wool Research Institute projects 7269
liquid-crystal polymers. review 3303
low temperature plasma, effects on free surface energy of polyethylene terephthalate 4878
Lutradur. polyester spunbond used to reinforce polyurethane in construction of automobiles 2482
lyotropic polymer systems. rigidity and orientation in spinning 6542
macromolecular chemistry, effect on textile industry, development of polymers 4065
manmade fibers and trends in Europe. high performance fibers 6517
mass diffusion of dye molecules in polymer matrix 6317
melt spinnable. mesh spinneret spinning technology from Teijin 5689
mesh spinneret spinning from Teijin 8066
metal-containing polymeric dyes control polymer degradation 4466
MicroPore's MicroTec waterproof, breathable fabric for sports apparel, nylon casted with polymer microporous film 6074
Moelnlycke's zinc oxide-containing medical dressing with polymer binding 7747
morphology and fiber character predicted through X-ray diffraction and thermal, spectrographic analyses 8119
multi-angle carbon fiber/polyetherether ketone laminates. fatigue testing 8736
natural polymers. polymerization reactions 1683
new prepolymer containing no Volatile Organic Compounds, for coating 472
Newtonian and viscoelastic fluids. fiber orientation related to velocity field 4870
nylon 6 and 66 properties compared, future uses predicted 3284
nylon 6 fibers. graft polymerization 7321
nylon 6. optimal reaction conditions 5695
orientation reduction in spun fibers of two-phase polymer blends 85
overview of modern polymer sciences 7206
pads containing superabsorbent polymer. study of fluid movement 6072
PBI high performance polymer. preparation and advantages (Conf. Paper) 8037
PBT. microfibrillar morphology. SAXS 2483
PBZ class polymers in advanced composites for aerospace applications (Conf. Paper) 8034
PBZT fibers. mechanical properties. advantages, applications. composite properties 4871
PEEK fibers, effects of take-up speed, drawing, and heat treatment on structure 882
PEEK polymer. crystallinity effects on mechanical properties 1828
PEKK as thermoplastic matrix for high performance composites 4307
PET. necking behavior during high speed spinning 1661
photochemical fading of colors. effect of optical bleaches 8106
PM polyamido acid. aging of concentrated spinning 3296
PMPIA synthesis. acylation of terminal amino groups 4872
poly (1,3,4-oxadiazole)s synthesized by polycondensation of dicarboxylic acids 916
poly(1,4-butylene terephthalate), high molecular weight through polycondensation 917
poly(acyloxy)aloxane. synthesis with carboxyl ligand. use as precursor for alumina fiber 918
poly(p-phenylene benzobisthiazole) (PBT) and nylon composite fibers. method. properties 7350
poly-urea fibers. polymerization. properties. end uses 7336
polyacrylonitrile. effects of sulfur dioxide and nitrogen oxide 8393
polyamide-imide and polyphenylene sulfide reinforced with short carbon fiber. wear rates and friction mechanisms 6543
polyamides synthesized from halogenated terephthalic acids. properties 919
polyamides, discovery and development of history 5681
polyamides, structural and mechanical properties 6544
polyamides. worldwide production, applications, and history 5680
polybutylene terephthalate. properties, applications, and prospects 6545
polycondensation of bisphenol-A acetate and isophthalic acid. reaction kinetics 7924
polyelectrolyte complex polymers, latex/polyelectrolyte artificial leather 6803
polyester fiber waste depolymerized for possible use as resin showed no film forming properties 6536
polyesteramide synthesis 1680
polyesters other than PET. Kodel 2, PIMT, PEOB, undeveloped formulae reviewed 8113
polyether ether ketone and polyether imide fibers from Teijin 4879
polyether ether ketone and polyether imide filament fibers from Teijin 4880
polyether ether ketone, polyether imide, and polyphenylene sulfide fibers from Teijin 4881
polyether ketone ketone polymer. high performance thermoplastic matrix system for composites 6546
polyetherketone fibers. properties and applications 8085
polyethylene glycol, properties when applied to a substrate. findings 7351
polyethylene succinate block copolymers and biodegradation properties 3304
polyethylene terephthalate and nylon. chain extension in extruder 3840
polyethylene terephthalate crystallization rate with various cyclic oligomer contents 89
polyethylene terephthalate fabrics. hydrophilicity of aminolyzed PET fibers 88
polyethylene terephthalate films. effects of draw ratio and annealing temperature on phase indices and tensile properties 87
polyethylene terephthalate films. effects on uniaxial and biaxial extension on intrinsic fluorescence 2485
polyethylene terephthalate fractionation. polymerization and spinnability 8120
polyethylene terephthalate, effect of ultraviolet radiation from air and argon plasma on free surface energy 4888
polyethylene, extended chain. gel-spinning techniques (Abstract) 8121
polyethylene, high molecular weight. effect of molding condition on thermal and mechanical properties 920
polyethylene/epoxy composites. melting, relaxation behavior 4334
polyimide composites based on Avimid K-111 prepregs 1049
polymer composites. sliding and abrasive wear 7825
polymer dispersion products from Hoechst for multiple applications 2788
polymer jet temperature and viscosity changes along spinning zone length 7329
polymer-solvent interaction in cellulose-N-methyl morpholine-N-oxide water 55
polymethylene terephthalate. synthesis and properties 6388
polynuclear diamines. changing the microstructure of aromatic copolyamides, benefits 90
polypropylene in knit apparel fabrics, blends 1172
polypropylene polymers, CR type. limited shear, swelling tension 5898
polypropylene, nylon, polyesters. consumption in the EEC nonwoven fabrics industry 8230
polypropylene. production to meet regulatory standards 3292

polyquinolines, preparation and properties 4882
polystyrene developed to replace blue wool in automotive fabric exposure testing 7096
polyurethane and halogenated polymer blends 5715
polyurethane and polyacrylonitrile. morphology and mechanical properties 5652
polyurethane and polyacrylonitrile. phase inversion, dynamic mechanical properties 8122
polyurethane based resins for new finishing effects. research by ROL 6149
polyurethane carpet backing systems, the Enhancer Plus and Eze-Release. systems features and installation 2156
polyurethane coatings and adhesives 6156
polyurethane developments. Perlons. cellulose derivatives 7352
polyurethane dispersion in leather coating 6157
polyurethane resins for artificial leather 2716
polyurethane typewriter ribbons, polyurethane urea, press packing sheet, MDI-based prepolymers 6547
polyurethanes used in biomedicine. measuring degree of microphase separation 5716
polyurethanes used in medical textiles. structure studied with fuzzy mathematics 7849
polyvinyl alcohol size, modified 1915
polyvinyl chloride plastisols. rheological properties 3305
polyvinylpyrrolidone. interaction with cationic dye. desorbing process 2770
processing high molecular weight, flexible-chain polymers (Abstract) 8123
property anisotropy. planning for special-purpose fibers (Abstract) 8124
radiation induced modification of polymer solutions. applications in textile finishing 4492
rayon grade dissolving pulp, processing 8079
reactions induced by electron radiation for coating, finishing, substrate printing 8443
reactive high polymers and copolymers 8542
reactive polymers used in textile finishing 3661
reconstituted carbon fiber reinforced polyether ether ketone composites. tensile and flexural properties 6309
research and development 6499
residual strain in carbon fibers/polyether ether ketone composites. Raman frequencies 6310
rigid and flexible nylon polymers, porosity variation 4883
rigid polymers transformed from liquid to solid state. morphology 7353
segmented polyester/urethane polymerization. exchange reactions 8125
single crystal fibers and solid state reaction 6548
solid-state polymerization plant developed by Buehler for Sunkyong Fibers for production of bottles 8115
soluble aramids. synthetic and glass transition temperature 921
spin finishes. polyalkylene glycol 8546
spunbonded fabrics from polymer systems. Tyvek. Trevira. polypropylene. production methods. end-uses 7546
structural effects of the properties of coloration 6324
structural-rheological characteristics of polymer solutions 3306
Sumitomo Chemical Company and Hercules to produce polyacrylonitrile [after 1990]. agreement details 4062
super absorbent polymers. suspension polymerization, gel polymerization. diaper manufacturing in Japan 297
superabsorbent polymers. North American market 2973
Teflon, its various finishes, properties, and importance in textile manufacturing process 4822
tensile deformation model 8676
thermal stability of polyheteroarylenes 4884
thermo-oxidative crosslinking by torsional braid analysis for polyamides 8918
thermoplastics, high temperature, correlated with composite counterparts 1084
thermotropic aromatic copolyesters. synthesis and properties 5709
Topsoft, polymer treatment to combine with shrink-resist polymers applied during wool processing. procedure details 6560
ultra high modulus polyolefins. bulk scale modification. problems in pilot scale processes 4885
ultra high molecular weight polyethylene 8126
ultra-high molecular weight polyethylene. entanglement of chains. relationship between memory and molecular weight 5717
ultraviolet/electron beam polymerization. Sunbeam Process used in manufacture textiles for protective clothing 8643
vapor-phase and liquid-phase grafting to hollow-fiber membrane. effect on water permeability 3485
vibrating behaviors under various environmental gas pressures. measurement with vibrating reed method 1437
viscoelastic flow through T-shaped channels, polymer solution 2486
viscoelastic flow through T-shaped junction. velocity measurement 8127
viscoelastic liquid. isometric nonsteady flow in spinneret capillary 4886
water-based polyurethane ionic dispersions 8919
water-soluble polymer sizing. effects on raw silk 984
weight proportion of benzoic acid in molten caprolactam. indicator for titrimetric determination 5473
wool bonded to polyurethane by heat pressing 1817
yarn spun from sulfuric acid solution of a mixture of polycaproamide and polyaminobenzimidazole 4846

POLYNOSIC FIBERS, SEE HIGH MODULUS (RAYON) FIBERS.

POLYOLEFIN FIBERS, SEE OLEFIN FIBERS.

POLYPROPYLENE, SEE OLEFIN FIBERS--POLYPROPYLENE, OLEFIN POLYMERS.

POLYTETRAFLUOROETHYLENE FIBERS, SEE FLUOROCARBON FIBERS.

POLYURETHANES, SEE FOAMS, SPANDEX FIBERS.

POLYVINYL ALCOHOL FIBERS, SEE VINAL FIBERS.

POLYVINYL CHLORIDE FIBERS, SEE VINYON FIBERS.

POPRYL IS AN OLEFIN--POLYPROPYLENE FIBER.

POST CURE, SEE DURABLE PRESS.

POVIDONE IS A MANMADE FIBER.

POWER CONSUMPTION (SEE ALSO UNDER OTHER HEADINGS, SUCH AS AIR CONDITIONING, AUXILIARY EQUIPMENT, COMPUTERS AND PROGRAMMING, ELECTRICAL EQUIPMENT, ENERGY, MILL BUILDINGS, AND UNDER SUBJECT HEADINGS OF SPECIFIC MACHINERY OR PROCESSES)
digital control for sizer drying area. temperature, speed, moisture in warp 5000
finishing industry. water, thermal, electrical energy consumption in Poland 386
laminar air distribution equipment, improved filtration, circulation, energy conservation 4739
LPS-140-10 washing line for cotton fabrics, energy saving system 5313
material, energy conservation, Hungarian knitting mills, changes 4263
spindles. calculation without bobbin variable 8178
weaving, tests to determine optimal parameters for energy conservation. warp tension 4211

POWERNET, SEE APPAREL--UNDERWEAR, ELASTIC FABRICS.

PRESSING (SEE ALSO OTHER HEADINGS, SUCH AS DURABLE PRESS, FUSING, IRONING)
apparel manufacture, pressing and finishing operations outlined

3709
disadvantages in comparison to vacuum extraction for sensitive fabrics 8537
efficiency problems with laundry finishing equipment, solutions 2076
heat distribution along pressing machinery rollers, formulas 551
Sellers continuous rotary fabric press 5174
Sockpress C from Heliot. boarding machine for socks and half-hose 7659
Sussman Buegeltechnik LS 2000 tunnel finisher and its success 3747
system models. derivation and applications 282
tailored clothing industry benefits from innovations in fusing and pressing. review of developments 1287
viscose/polyester adhesive lining nonwovens. effects of pressing and heat 4499
woven fabric pressing evaluated with photometer 6283

PRESSING MACHINERY
cold pressing technique from West Germany. technique and processing details 2855
cushions, cylindrical, spherical. optimal parameters for equalized pressure 553
IMB [1988] pressing machinery. advances in programming, automation 6194
Imece steam ironing presses for the knitting industry. examples of their range 8606
irons. high-tech professional series from Propress 4545
J. Menschner Maschinenfabrik Contipress for wool and synthetic fabrics 2799
Sellers continuous rotary fabric press 5174
spreading machinery, features and models 6195
state-of-the-art pressing and finishing equipment from Veit. automation 3721
Sussman Buegeltechnik LS 2000 tunnel finisher and its success 3747
Test, Goffman, Veit, and Lemer pressing machinery for suits, evaluation 552
trends in drycleaning equipment. hand pressing and automatic pressing machinery 2857

PRINTING (SEE ALSO OTHER HEADINGS, SUCH AS DYEING, FLOCKING, PIGMENT DYEING AND PRINTING, PRINTING PASTES, PRINTING--SCREEN, PRINTING--TRANSFER)
AATCC conference highlights. improper preparation of fabric for printing 379
AATCC printing symposium review. automation stressed 7563
Alcoprint P, synthetic pigment thickener. system, products, advantages 5280
Alcosist AFA antifrosting agent. continuous dyeing or printing of nylon carpets with anionic dyes 7581
Amsoline F surfactant, uniform dyeing of wool, nylon fabrics 5228
aramid fibers 4894
automated work room by Stork-Brabant for Laura Ashley. future projects 6848
Basilen Yellow M-8GD. dichlorotriazine reactive dye from BASF 5256
benzyl spirit/etriol, printing intensifier, method 5297
blends, polyester/cotton fabrics 5282
burn-out printing or chemical lacemaking. procedures and formulae 3640
CAD. problems encountered in design reproduction in printing process 7872
carpet tiles. production and printing 5956
chemical processing. present status and future developments 7558
classified into nine types, seven methods of printing. drycleaning procedures for fabric finishes and trims 6081
Color-CAD/CAM procedure BELLE. direct printing of textile fabric 7874
colorpaste preparation in printing laboratory, automatic 5283
composites 6854
conference, West German Dyer's [1988] 6830
corona technology applied to geotextiles. inline system from Matai 3564
cotton fabric printing with D brand vat dye powder, sodium hydrosulfite intensifier 1242
cotton knit and woven fabrics, preparing 385
cotton, cationization. printing applications 5284
cotton, polyester and blends. recent coloration developments 3604
Create Design Ex from Benz. CAD system 7580
developments in chemistry, machinery, auxilliary equipment, foam printing 463
discharge and relief printing methods in nylon blends. eliminating shrinkage during steaming 391
discharge printing used by companies in Como for haute couture fabric 8527
discharge printing. fading and discoloration in fabrics 464
energy conservation, effluent treatment and control in modern processing operations 6819
ethone for cotton, viscose printing, dye enhancement 5285
evolution. technical and economic. importance of material preparation 6925
finishing agents, high grade, for printed fabrics 5273
flock. antistatization for optimal effects 1987
foam application units. dynamic flow phenomena 7576
gold powder 5286
GSCP as thickener for disperse dye printing 7635
GSCP thickener/sodium alginate in printing with reactive dyes 7632
guide to recent advances in textile wet processing 6817
Helizarin Binder FT. acrylic pigment binder for direct, resist, and discharge printing from BASF 5190
Helizarin White RTN. titanium oxide preparation from BASF 5258
high temperature steaming to fix printing dyes. factors and problems 1961
Holger Stracken and his revival of Blaudruck hand-printing style 3577
innovations at [1987] ITMA. finishing, dyeing, and printing 6106
ITMA [1987] wet processing machinery 1176
ITMA [1987]. CAD-CIM in printing. Designmaster 9000 and Aloha systems 6856
ITMA [1987]. exhibitors and their developments 5281
ITMA [1987]. trends in CAD-CIM in textile printing. requirements system 6132
Japan, textile printing. renovations and technological advances in Japanese systems 1241
M&S International design. Personal IGOS M&S CAD/CAM System for weaving and printing and carpet manufacture 8231
management of process with personal computer 5515
multicolor. specification of color-rendering properties. influence of background 3586
overview. part 1. design, tracing and screen preparation 8442
paste and thickening agent flexibility 4477
paste. Van Wyk computerized color kitchen for paste mixing without solvents 4469
pastes and thickeners, rheological assessment. alginates and plant seed gum derivatives 4470
photographs transferred onto chemically treated cloth 8528
pigment printed fabrics, color loss due to drycleaning solvents. manufacturer's responsibility 5395
pigment printing. Alcoprint P system 8531
pigment printing. modern technological advances in the field and its use 8530
pigment. Acramin system. description 8529
polyester. recommended discharge and resist chemicals 3641
polyester/cellulose blends. new printing reactive dye fixation in neutral pH conditions 3601
polyester/cotton blends. thickeners for printing paste. developments 6133
polymerization reactions induced by electron radiation 8443
printing, world trends 5287
quality of unrefined water in printing houses. pollution levels and their treatment 7203
quaternary ammonium compounds in wet processing 7552
rayon and polyester/rayon fabrics. wet printing methods. problems

3642
reactive dyeing and printing on polyester/cellulose, polyester, cellulose fibers, methods 421
reactive dyes, synthetic thickeners 5288
reactive/pigment printing. benefits. limits. Cibacron system of Ciba-Geigy 1952
Remazol dye fixation on unimpregnated and Naphtol AS-impregnated cotton. cold pad-dwell method 461
resist, reactive dyes 5270
roller. naphtholated yarns 5289
Rongalite during washing after printing acetate knit fabrics, effect on colorfastness 5192
rotary printing. finish-conditioned surface effects 4471
rotary screen, of viscose/nylon 6 needled nonwoven with active dyes hydrophobic and hydrophilic fabrics tested 465
silk fabric, definition printing technique 5290
silk. preparation, dyeing and printing. review 3607
soaping agent 5230
starch phosphates. properties and application 470
steaming. problems in parameter accuracy. Spriano's Tosdisc 211D control system 6933
Stork. Total Systems Control integrated printing and finishing 6129
TDO textile printers. company profiled 462
technical advances 7560
technical finish for the turning point 5274
techniques, special. finishing 5275
Tennyson Textiles, Australia's biggest fabric prints 5492
textile chemical processing. water management 8446
thickener for reactive printing. modified guar gum and glycerine-stearic acid 6931
thickeners in textile printing 5291
Tiragum gum thickener for disperse printing. guar gum replacement 8526
towels 5292
transfer printing. synthetic crosslinking agent. pretreatment of PET/cotton blends 1243
union dyeing and printing 5209
union fiber. dyeing and printing 1918
vat dyes. developments, applications. cellulosic fibers and their blends 3636
velvet fabric samples. results of direct printing and discharge printing 6869
vigoreux printing by OMP, Biella for high quality worsted yarns 2779
vigoreux printing process for wool sliver at CSIRO 4472
vigoreux printing system for wool developed by CSIRO. Siroprint-Sirosteam System 1956
vigoureux technique. CSIRO Siroprint system 6926
Vitexol D. defoamer from BASF 5196
warp knitted fabrics, surface effects through pigment printing 3643
West Germany, postwar textile developments. VTCC fortieth birthday 6419
wet, of rayon and polyester/rayon blends 466
wool fabrics. machine washable printing 2775
wool fabrics. melange or Vigoureux printing of slubbing 2774
wool. preparation developments. discharge, resist, transfer processes 7633
worldwide survey, textile printing developments from [1984-1987]. trends 1953
xerographic printing by Georgia Institute of Technology 3644
xerographic textile printing process developed at Georgia Institute of Technology 6134
xerography. Georgia Tech technique from existing copier technology 8532

PRINTING--SCREEN
developments by STK, Stork, Kuesters 6135
JoAnn Giordano, silk screen artist, uses images and colors reminiscent of those of Tibetan tankas and prayer rugs 1396
laser production of screens for rotation printing, computer control, Stork 467
organic pigment, polyvinyl chloride screen printing, cotton fabrics 5293
pearl effects on stitchbonded nonwovens using Tanaprint CR finish 5294
polyester/cotton and polyester/viscose. comparison of effectiveness of screen printing with disperse and reactive dyes 6927
reusable roller screen end ring, SwissLink. Elsaesser 4473
squeegees, roller, knife, and air knife. comparison 6136
squeegees, roller, ordinary and air knife. rotary screen printing 4476
Stork Brabant CT-IV universal printing/impregnating system and printing paste preparation 3645
Stork Brabant Rotary Screen Foam minimum application printing system 3649
SwissLink removable end rings for rotary printing from Elsaesser Maschinenhandel 3646
valances, screen printing methods to create decorative borders 3805

PRINTING--TRANSFER
Blacky Mode-Design, thermo-printing plant in Switzerland for short-run markets 1954
cotton and cotton/polyester blends. new resin pretreatment. effects on dye transfer 1244
cotton pretreated with crosslinking agents and ethylene glycols. sublimation transfer printing 3647
cotton pretreated with ethylene glycols. solubility parameters 1245
differential equation, relationship of fabric and dye, color intensity 4474
fastness properties and printing behavior of acrylonitrile grafted nylon 6 fabrics 6928
heat transfer printing, developments. ink, penetration, natural fibers 1246
high frequency electrical field process with disperse dyes and crosslinking agents 8533
Luprintol FBT. binder and film former in transfer-paper printing with Bafixen dyes from BASF 5191
polyacrylic fibers. problems in heat transfer printing using disperse dyestuffs 7634
polyethylene glycol maintains swollen state of cotton during sublimation transfer printing 6829
pretreatment of PET/cotton blends with synthetic crosslinking agent 1243
simultaneous curing/transfer of melamine formaldehyde treated cotton and cotton/polyester blends 6929
solubility parameters for transfer printing of cotton pretreated with ethylene glycols 2776
Stork Brabant technology for high quality transfer printing of natural fibers 5975
synthetic fabric printing of polyesters, nylons, acrylics and blends 4475
thermo transfer printing, dyestuffs, synthetic fibers, machinery 1248
wool. preparation developments. discharge, resist, transfer processes 7633
Xpres sublimating dye transfer marking for reproduction of images onto fabric 1934

PRINTING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS PRINTING MACHINERY--SCREEN)
ATME-I [1988] in Greenville 5536
carpet printing. ITMA [1987] trends 6096
carpet tile finishing range from Fleissner combines steaming, washing, and drying 3648
carpet tiles. M 5970 jet printer. ETF 6097
energy conservation, effluent treatment and control in modern processing operations 6819
foam application units. dynamic flow phenomena 7576
hosiery and men's underwear industry 1866
ITMA [1987] highlights in wet processing. advanced technology, developments 4393
ITMA [1987], dyeing, printing and finishing machinery innovations 3637

ITMA [1987]. developments 381
ITMA [1987]. innovations and improvement. CAD systems. paper samples 6920
ITMA [1987]. knitgoods 6093
ITMA [1987]. printing developments 2772
ITMA. laser engravers, automated dye kitchens 2777
Laura Ashley's Helmond plant, new equipment from Stork Brabant 6137
M 5970 jet carpet tile printer from ETF Maschinenfabriek BV. printer features and operational process 1955
roller printing machine. components. function. comparison of printing machines 8534
Rotamac 4 and Hydromag 6 from Buser. features and capabilities 2778
Spanish machinery review. crochet, trimmings, raising, dyeing, printing, medical textiles 1536
Stork Total Systems Control for wet processors 3121
Stork. Total Systems Control integrated printing and finishing 6129
Swiss textile machinery developments. high praise from experts 5537
Transilon conveyor and processing belts from Siegling. coated with polyester for resistance to solvents 5295
vigoreux printing system for wool developed by CSIRO. Siroprint-Sirosteam System 1956
vigoureux technique. CSIRO Siroprint system 6926
xerographic printing by Georgia Institute of Technology 3644

PRINTING MACHINERY--SCREEN
Austria. textile machinery industry and its high quality, high specialization 4742
innovations at [1987] ITMA. finishing, dyeing, and printing 6106
ITMA [1987]. printing developments 2772
laser systems for rotary-screen engraving seen at G-Mex exhibition 4744
roller and blade squeegees compared 3650
rotary screen printing. in-depth look at machinery 1247
rotary. applications of lasers in process. ITMA [1987] exhibits 5281
screen engraving. rotary. laser 1948
squeegees, roller, knife, and air knife. comparison 6136
squeegees, roller, ordinary and air knife. rotary screen printing 4476
stages of process. design, tracing preparation, screen photogravure 8442
Stork Brabant CT-IV universal printing/impregnating system and printing paste preparation 3645
Stork Brabant Rotary Screen Foam minimum application printing system 3649
Stork STK-2000 laser engraving system for rotary screen printing 2773
suppliers of equipment, contract services at Bobbin Show [1987] 468
SwissLink removable end rings for rotary printing from Elsaesser Maschinenhandel 3646
SwissLink reusable end rings by Elasaesser Maschinenhandels 8535
Zimmer. advances in automation 8536

PRINTING MACHINERY--TRANSFER
foils used in transfer printing method to create metallic fabrics. developed by Leonard Kurz of New Zealand fashion manufacturers 4420
thermo transfer printing, dyestuffs, synthetic fibers, machinery 1248

PRINTING PASTES (SEE ALSO OTHER HEADINGS, SUCH AS PIGMENT DYEING AND PRINTING)
automatic preparation 5296
benzyl spirit/etriol, printing intensifier, method 5297
burn-out printing or chemical lacemaking. procedures and formulae 3640
flexibility, thickening agent and print paste 4477
foam printing pastes. rheology. constitutive equation 471
foaming pigment printing pastes for cotton, cotton/polyester woven fabrics 4478
GSCP as thickener for disperse dye printing 7635
GSCP thickener/sodium alginate in printing with reactive dyes 7632
Guar Gum. printing with disperse and reactive dyes 1249
mixing. Van Wyk computerized color kitchen. without solvents 4469
organic pigment, polyvinyl chloride screen printing, cotton fabrics 5293
pastes and thickeners, rheological assessment. alginates and plant seed gum derivatives 4470
pigment prints. rubbing fastness. influence of various parameters 7629
pigment. Acramin system. description 8529
polyester. recommended discharge and resist chemicals 3641
recipes, computer generated based on standard data, accuracy questioned 5298
Stork Brabant CT-IV universal printing/impregnating system 3645
tamarind gum as a thickener in printing paste, more cost effective than guar gum 6930
tamarind gum as thickener in printing polyester fabric 3651
textile printing, dyeing and finishing chemicals. trade names 6810
thickener for reactive printing. modified guar gum and glycerine-stearic acid 6931
thickeners for polyester/cotton blends. printing 6133
Tiragum gum thickener for disperse printing. guar gum replacement 8526
vat dyes in printing pastes. dispersion, coloration, recommendations 4479
vigoreux printing by OMP, Biella for high quality worsted yarns 2779

PRODUCTION CONTROL (SEE ALSO OTHER HEADINGS, SUCH AS INDUSTRIAL ENGINEERING, INVENTORY CONTROL)
apparel manufacture. computer systems to improve real time production control 8757
apparel manufacture. Schiesser's mill organization and production 700
applications of computer aided manufacturing for small apparel companies 3696
bar coding in apparel industry pushed forward by Quick Response and vendor marking 5358
Barco Industries developed Sycotex system for computer integrated manufacturing with multiple applications (Trade Lit.) 8796
Bee Line Products of Dublin. solution of problems created by volume manufacturing 2813
CAD in weaving. increased and improved production flexibility 8272
CIM at ITMA [1987]. relation to other computer systems. emphasis of manufacturing 7873
CIM systems from Uster 7137
color woven fabrics. quality control demands in today's markets 3130
complex yarn spinning. process control by points of light reflection 7325
computer aided control at Saic factory in Saint-Amarin 6355
computer aided production preparation. automatic selection of process parameters. code system 2294
computer aided system for Favrot. specific problems. solutions 7147
computer control system, speed and periodic action control 4504
computer integrated manufacturing 4720
computer monitoring system. GDAQ2 from Grieb 725
computer programs for simulating production conditions and aid in problem solving 6352
computer system at Hungarian Dyapjufono Wool Concern 726
computer systems for Macomber looms used by handweavers. increased weaving speed 1000
computerized planning and control, India's needs 2264
computerized process control developments for the dyehouse 2741
computers. problems with cost, reliability, and user training 2288
data processing role in computer integrated manufacturing 7150

directory of companies in United Kingdom selling production control systems 2285
dyehouse control, computerization at Magyarovar knitting factory 1919
dyeing industry. computer systems 4427
Elcom 18 from Erhardt and Leimer. process control and communication system used in fabric manufacture 5499
electronics in knitting. developments for tricot and raschel machines 7424
electronics in the control and automation of wet processing 8437
ensuring consumer standards. manufacturer liability 2295
Eton unit production system used at Courtaulds' wadded garment production plant 3723
factory control systems. considerations and definition of computer terminology 2822
FASLINC and Quick Response, fabric suppliers linkage council activities 2263
fibers, wool. use of drafters and rovers for optimal processing and control 4086
finishing equipment at ITMA [1987]. computers and process control 4399
finishing machinery, ITMA [1987] Paris. process control, automation 1183
flexible apparel manufacturing for improved productivity and quality 8778
Flexible Manufacturing System (FMS) from Rieter 7156
General Sewing Data system. setting time standards adapted to produce work tickets at manufacturing plants 4529
Girmes installs comprehensive information processing system 8800
Hungarian apparel cooperative. microcomputer for inventory and production control, orders 2293
Hungary. textile industry. surveys of changes [1975-1986]. labor, recommendations 697
IMB [1988]. highlights 8587
INA Systems Suspension/Bundle Online Real Time Production Management System in Swiss garment plant 3714
Incas' plants and equipment for the control and analysis of production 8792
Invesmove flexible production system for apparel manufacturing 4516
IROS-100 from Automatik. on-line quality control system for molten polymer processing using infrared analysis 8116
ITMA [1987]. computers and manufacturing logistics 6351
Jordan, Lovatt, and Jones manufactures replacement controllers, retrofit devices, and inspection machines 4243
knitting machine utilization by different work shifts. analysis 1510
logistics and Just-in-Time technology 7163
management performance through systems. scenario offered 5517
manufacturing control for maximum quality control of products 2267
Marv Holland Industries. Canadian uniform manufacturer. large inventory and self-contained work stations 2131
mechanical finishing machinery at ITMA [1987]. consolidation and control instead of innovation 3673
Mervyn's department stores. developing private labels to achieve better production control 4708
microprocessor control system for web guidance, Erhardt + Leimer's Elcom 18 unit 4721
microprocessors. uses in textile industry 3914
mill productivity versus flexibility 8827
modification to reduce consumption of electricity and steam in Indian textile industry 1521
Monforts' Montex tenter with MSPS production control 3679
monitoring weaving production with computer system 2289
overhead materials handling systems, computer control, construction 2311
Pakistan. evaluating and improving productivity in textile industry 5484
process control system from Ramisch Kleinewefers for calenders with Nipco rolls 7651
productivity program developed by SITRA for analyzing spinning mills' productivity 7151
productivity. strategies to increase 3070
quality assurance throughout manufacturing process 7044
Quick Response. symposium hosted by Society of Dyers and Colourists 1512
raw materials of fabric, effects on protective coating properties 1822
Roaches Engineering dyehouse computer-control units purchased by ICI 2740
Satellite Plus for real time production control at Lebanon Apparel 5516
sizing degree, controlling warp. liquor uptake. devices from Pleva, Sucker and Mueller 4162
sizing machinery. ITMA [1987]. various manufacturers 5841
sizing, computerized monitoring of production and quality 2555
small business textile production 3100
Staeubli Programming System 18 for dobbies and card cutting machines 8805 8807
Staeubli Programming System 19 for Jacquard machines. Jacomat software 8808
suspended garment production systems analyzed with respect to Quick Response 2011
Sycotex System. computer integrated manufacturing system developed by Barco Industries (Trade Lit.) 8810
systems shown at ITMA [1987] Paris from various manufacturers 5532
technology. speed made possible by materials handling and integrated materials flow advances at ITMA [1987] 4796
textile factories of the future. computer systems managing production. customer orders basis for production planning 3918
time study for garment assembly. work factor process 2298
Toyota Sewn System used at Top Print AB uniform manufacturer 1513
unit production systems at Bobbin Show [1987] from Eton, Gerber, Durkopp, INA, Investronica 528
used to determine tear load, width, surface density parameters for new woven wool fabrics 4179
VPZ control system for transportation of textiles, computers 4731
weaving control systems from Barco, Zellweger-Uster, Computrol 8253
weaving mill, machine and progress control 732
weaving. computer integrated manufacturing (Trade Lit.) 8816
yarn manufacturing. unevenness in ring spun yarns. Statistical Process Control 2269

PRODUCTION MONITORING, SEE MONITORING SYSTEMS, TEXTILE MACHINERY AND UNDER SUBJECT HEADINGS OF SPECIFIC MACHINERY.

PROGRESSIVE SHEDDING LOOMS, SEE LOOMS.

PROOFING (SEE ALSO OTHER HEADINGS, SUCH AS ANTIBACTERIAL AGENTS, FLAMEPROOFING, FUNGICIDES, GERMPROOFING, INSECTPROOFING, OIL REPELLENCY, RESIN FINISHING, ROTPROOFING, SHRINKPROOFING, SOIL RELEASE FINISHING, SOIL REPELLENT FINISHING, WASH-WEAR, WEATHERPROOFING, WEATHERING)

PROTECTIVE CLOTHING (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL, COMFORT, FLAMMABILITY, FUNGICIDES, GLASS FABRICS, HEALTHCARE AND MEDICAL TEXTILES, HEAT PHENOMENA, MOISTURE PHENOMENA, NYLON FABRICS, SPORTS PRODUCTS, TEMPERATURE)
A+A Exhibition. nonwovens 8648
all-knit protective gloves, cotton blends, uses, production 4621
Allied Fibers' Spectra Shield, Spectra fiber soft body armor 6023
Allied's Spectra fiber used by United States Army to reduce weight of vests and helmets 7742
aramid fibers. Kermel manufactured by Rhone-Poulenc 867
ASTM and NFPA. protective clothing standards 8642
ballistic armor from extended chain polyethylene fibers 4380
ballistic. Spectra Shield from Allied Fibers 5989
Batelle designs robot to test protective clothing in simulated,

hazardous conditions 7097
bullet proof vests. MS-1 female body armor vest evaluation 7729
carbon fiber yarns from Schappe. protective fabric applications 2544
chemical protective clothing and equipment. summaries of Federal research programs 7730
chemical protective clothing system. effects on soldier's performance 7731
chemical protective clothing. liquid cooled undergarments and air cooled vests. performance 7734
chemical protective clothing. overview, standards 7732
chemical protective mask and gloves. effects of use on cognitive problem solving 7733
composite fabrics 8644
Cordura anti-snake bite leggings 5988
decontamination workers. protective garments of Du Pont's Tyvek 2974
Du Pont Kevlar HT and HM. properties and applications 5641
EniChem technical fibers and textiles. uses in firefighting, automobiles 4068
Extended Cold Weather Clothing System (ECWCS). use and care guidelines 7728
fabrics as liquid barriers. development of improved protective clothing for the United States Army 6276
fencing apparel. resistance to perforation 4609
finishes and fireproof fibers compared for performance and cost 6032
fire resistant fibers from Rhone-Poulenc. Kermel, Clevyl, and Rhovyl 2450
fire resistant polyacrylonitrile fiber and fabric 7354
fire resistant protective clothing. overview 7735
firefighters' protective clothing fabrics. durability to heat and light 2658
flammability standards in textile testing. need to upgrade 8719
Fortafil aramid fabrics from TBA Industrial Products. fabric properties, application 1820
Glen Raven's Sef-Plus flame retardant fabric for firemen and industrial workers 6735
glove liners. effect on sweat rate. comfort and psychomotor task performance 2975
glove, fireman's 6239
high performance textile types of fabrics and various fibers from Carr Reinforcements in United Kingdom 1646
high performance threads 7393
Hoechst Celanese PBI. flameproofing characteristics 5686
Ibena's range of protective fabrics 1849
INDEX [1987]. summaries of papers. industrial clothing 3527
industry overview 7736
information for industrial launderer. maintenance for high temperature resistance uniforms 2077
laundry rental opportunities 4590
Lenzing P84 flame resistant polyimide fiber, similar properties as polyaramids 3251
limited-use protective clothing. fabrics. construction 4622
melt blown fabrics. Exxon process 6061
metallized fabrics. manufacture and end uses 1873
mountain climbing apparel fabric. Pertex 6 from English Perseverance Mill 2702
nonwoven and woven fabrics in industrial applications 6808
nonwoven membrane laminates. fabric thermal insulation and water vapor permeability 1139
nylon ballistic panels. penetration by fragment simulating projectiles. mechanism 2693
nylon ballistic panels. penetration by fragment simulating projectiles 2692
Panotex fire resistant and high temperature resistant fabrics. applications, composition, properties, sample swatches 3524
permeability testing classification of footwear fabrics, qualitative and quantitative methods 5121
personal flotation devices. standards 4623
physiological assessment of wearing properties. protective clothing. standardized specifications 4669
raincoats, waterproofing without coating 7680
Repel manufactured by Sunbeam Process. high breathability and solvent nonwetting properties 8643
robotic mannequin being developed to test protective clothing for hazardous conditions 7850
safety fabric resists cutting, stabbing and impacts 333
software for choosing protective clothing fabrics 6757
space suits. protection requirements from hazards and environments 7737
Spectra fiber reinforced composites. ballistic protection 8099
Spectra Shield from Allied-Signal. for the body armor market 3510
spider silk, gene holds secret to high tensile fiber. PA Technology team investigates 6524
Springs Industries' water repellent Ultrasuede fabric and Facile, lighter Ultrasuede version. applications 6756
Sunbeam microprocess membrane coated fabric. test marketing for use in protective garments 8540
textured glass fabrics with carbon fibers, ceramic fibers, sheet laminates 4833
thermal strain of soldiers. reduction by air cooled vest 7738
totally encapsulating chemical protective suits. test protocol for measuring dynamic integrity 7739
types for waterproofed apparel, ensuring watertightness 5384
Tyvek Practik microperforated polyethylene nonwoven. protective clothing material 281
Viscose FR fiber from Lenzing. flame retardant 98
washable workwear. functions. fiber choice 2146
West German civil service, uniform and protective apparel standards testing 3838
work and protective clothing requirements catalogued 7722
work gloves. Hungarian industry combines experience and new technology 8298
yarns, high performance 7399

PROTEIN FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS HAIR FIBERS, KERATIN, MOHAIR, SILK, WOOL)

Chinon. dissolution of casein component by protease enzymes 8129
polyester/silk and polyester/wool blends analyzed with trichloroacetic acid and methylene chloride 6266
synthetic poly(alpha-amino acid) fibers. enzymatic degradation 2472
wool and epidermis microfibrils, reconstitution 33

PROTEINS, SEE KERATIN, PROTEIN FIBERS, SILK.

PYROLYSIS, SEE DETERIORATION OF MATERIALS.

QUALITY CONTROL (SEE ALSO OTHER HEADINGS, SUCH AS COSTS, SPECIFICATIONS AND STANDARDS, STATISTICS, TEXTILE TESTING, TIME STUDY, UNIFORMITY)

adhesive seaming, high speed method with less exposure to heat 5383
angora. Italy. testing to better quality and quantity of production 6468
apparel and textile industries, correlating 6235
apparel industry, implementation of Quality Assurance Process. benefits 5485
apparel manufacture. balance of quality, productivity, cost, and delivery 6967
apparel manufacturing, quality assurance 3898
apparel production. the role of textile workers 715
assurance, quality. throughout manufacturing process 7044
ASTM and industry standards. Minimum Average Roll Value for geotextiles 8398
automatic detection and testing of splices with Textechno devices 4106
batch dyeing. yarns on cones and fabrics on beams 1933
beam warping. narrow quality tolerances. Mayer's DS 42/35 NC beam warping system 5830
Brazil, knit fabric industry 5044
British knitting companies, investment in quality control yields cost

savings 5062
carbon fiber manufacture. standards applied by Toray 8822
carpet manufacture. ITMA [1987] trends 6250
Celanese Industrial Fibers 6363
CIM. possibility for reliable, reproducible, improved quality results 7138
color matching and measurement 4687
color woven fabrics. quality control demands in today's markets 3130
color. dyeing industry 5199
composite knit fabrics, quality evaluation method with structural change 5046
control system, speed and periodic action shearing control 4504
cotton samples. comparison of different video trashmeters used in quality control 7053
data monitoring systems. uses in quality control. Saurer Alima DMS for TM machines 7882
Datacolor's system, dye recipes, quality control 406
defect recognition software for knitting machines from the Institut fuer Textil- und Verfahrenstechnik 3124
defective machine parts, detection. controlling U% and improving card sliver quality 3332
defects. evaluation 3080
design causes forty percent of quality problems. solutions 7168
Dexter Corporation 6364
dimensional stability of fabrics 7813
dyeing and finishing. producing first quality fabric. raw materials parameters 2265
dyeing operations of polyesters and its blends 413
dyeing socks and sweaters. satisfying market demands with uniform coloration 3598
dyes measuring viscosity of liquid dyes 7625
dyestuffs. inspection and testing. residual color deviation 446
Electronics in Textiles conference. quality control in manufacturing machinery 3117
ensuring consumer standards. manufacturer liability 2295
fabric production, raw material control. knitting machine variables 2266
fabrics. IRO/Calator machines for testing. computer integration 738
fabrics. standardized performance specifications determined by fabric manufacturer prior to sale 797
fiber and yarn quality tested prior to processing 5602
fiber image analysis 1441
finishers. procedures for end product orientation 3082
French textile industry. initiatives taken by SGICF, BOTITEX, ASQUAL, and GRIT 6390
G-Mex Textile and Technology exhibition. post-ITMA developments in quality control and testing equipment 4648
garment dyeing. testing for shrinkage, proper dyes and uniformity of materials to be dyed 8508
global industrial strategies for product design and marketing 1491
highloft, study reveals widespread consumer dissatisfaction. manufacturers warned to improve quality control 3547
Hungarian textile mills. production and laboratory systems 731
HVI testing and blending. advantages at Cone Mills 7154
ICI Fibers in Doncaster England, quality control processes 7167
imitation model using, scanner control for fabric uniformity, design, abilities 5518
importance. myths about. zero-fault programs in quality management 7123
In-Process Quality Control Program in slashing operations 2552
inspection of knit fabrics. Novakust Knitscanner 7430
Institute of Industrial Launderers' quality assurance process at Jack Brown Uniform Rental 2862
Integrated Color Network from Datacolor. quality control for finishing industry 4390
integrated. printing and finishing, Total Systems Control by Stork 6129
International Mohair Association. quality standards to determine market value 6471
Japanese Total Quality Control model and standardization laws 1514
Joyce-Lebel 3CS computerized optical measurement device for yarn density 4668
Just-In-Time applied to sewing line 3879
jute mill 4821
Knitscanner from Novakust. inspect knit fabrics in any structure, form, or size 6689
knitted underwear. management. two examples 6178
knitting industry. quality initiative program based on British Standards 4707
knitting sector and management requirements 7119
knitting. electron microscope evaluation of latch needles 8296
knitting. Sensofil mechanism on Stoll CMS Selectanit flat knitting machines 5938
knots in fabric and knit goods. textile defects as possible signifiers 1732
Kuris High Tech cutting system and textile defect scanner 2837
laboratory dyeing machinery and processes from Ahiba 6125
laboratory dyeing. Model 350/6 Microcolor machine from Pretema 7602
Levi Strauss. assuring quality of fabric 3897
load factors, effect on cleaning performance test 574
manmade fiber industry. practice reveals many deviations from ideal testing and specification standards 4032
manufacturing control for maximum quality control of products 2267
Memminger's quality control systems for circular knitters 4260
Mervyn's department stores expanding. emphasis placed on quality control 4708
microprocessor-based quality and process control systems in Indian textile industry 7890
microprocessors. uses in textile industry 3914
mistake-proofing method of industrial quality control 7871
need for continually high levels of quality answered by automation 7131
new model for quality achievement. specialization, zero defect goals, customer service and low cost objectives 7169
nonwovens production. measuring technique for online quality control 1044
off-line quality control applied to engineering problems associated with products and processes 2276
Open End Tester 80 from Otto Stueber. yarn quality control at rotor spinning machine 961
performance improvement in laundries. critical role of employee involvement 8769
plant. information processing system for corporate management 4704
polyacrylonitrile fiber, standards and quality of Anilan produced in Poland 43
printing. thickening agent and paste flexibility 4477
program at Shasta Linen Supply of Sacramento 6218
quality control manual. requirements and organization 7891
quality control method for embossed foil trimmings for leather using government standards 4614
quality control tentering. computers and automation 5335
quality control through SPC (Conf. Paper) 8765
quality management requirements. knitted merchandise 8775
quality management. statistical process control techniques 8823
Roaches flash ager unit for dyeing plant laboratories 5208
Rothermael Finish Analyzer. infrared spectroscopy used to measure concentration of finishes 8432
rotor spinning. yarn fault detection. Zellweger's Uster Polyguard system 8176
scouring wool. FLOCOM process developed by Wool Research Organization of New Zealand 6840
serviceability. furniture and coating materials 6284
sewing. Sandolub for friction reduction 5088
sizing agents from corn and potato starches, extraction procedures used on cotton yarns 694
sizing and slashing operations. factors to monitor 2559
sizing, computerized monitoring of production and quality 2555
slashing components. troubleshooting guidelines 1742
slashing. process control. process modeling methods 1743

slashing. quality control practices for better warp production 1741
Soviet classification system for woven fabrics, based on nomenclature of indicators 5153
Spinlab Sliver Monitor 700 System. sliver evenness monitor 938
Spriano's Tosdisc 211D for control of steaming parameters in printing 6933
Sprint initiative. application of Pecci of Capalle 5486
spun yarns for knit fabrics 5142
statistical process control for quality maintenance. Parento Analysis, cause-effect studies 2268
TALC. voluntary standard for flagging fabric defects 5478
testing methods and standards in industry adapted to technical advances in science 4647
testing water supply for CHEMSET machines in New Zealand 8743
testing, textile. overview of its roles and importance 6345
Textile Institute's [1988] Annual World Conference. review of some papers presented 7964
thermal treatments. control of optimal conditions. efficiency 6960
Truetzschler's cards-information system for monitoring Model DK 740 cards 3328
Unilux Strobe light. improvement of visual fabric inspection 8821
Uster Sliverdata. use of new trends in online quality control monitoring 7879
viscosity dyes 3860
warp preparation. improvement. new systems. yarns chosen 6665
warp yarn defects, tearing during weaving, causes, prevention 4983
washability tests from International Wool Secretariat 7086
weaving. international quality standards. United States, Europe and India 5036
wet processing. gray preparation and post gray preparation. quality control measures 1515
wet processing. maintenance program for fiber, yarn, and fabric processing 1184
woolen yarn. preparation, spinning and winding. various processes 8142
yarn diameter measurement detector. data transferred to central computer for quality analysis (Trade Lit.) 8183
yarn manufacturing. unevenness in ring spun yarns. Statistical Process Control 2269
yarn numbering system with electronic control from Zweigle 6267
yarn separation in seam areas, test method, causes, stress level 5470
yarn. PPM-120-3 air jet spinner, operational parameters for cotton yarn 4122
Yarntester unit by Superba. objective testing of spun yarns. cost reduction 6810

QUAZUL IS A NYLON FIBER.

QUILLING

QUILTING

African-American contemporary quilting 7691
African-American quilts, strip or improvisational. traditional and contemporary 4549
African-American quilts. improvisation based on tradition 8673
bedquilts. production process 8607
Bobbin Show [1987]. quilting machinery highlights 554
broderie perse used in quilts based on Oriental rugs 4550
Carolina Creations. profile, computer applications 2628
ceramic fabrics, insulations, and metal foils quilted using ceramic thread. insulations for aerospace vehicles 5138
design, computer aided, for images of pop idols by fiber artist Marcia Ente 8674
designs using computers, Jane Dadey. software described 1511
feather motifs in handmade quilts 2846
fiber artist Judith Larzelere adapts Seminole strip piecing technique 5382
heat sensitive filling material used in quilted articles. damage during cleaning 2075
nonwovens bonded with ultrasound 5994
quilts based on Oriental rug format and structure 4551
University of Bielefeld quilting art exhibition. twenty-six West German artists 3982

RADIATION (SEE ALSO OTHER HEADINGS, SUCH AS PHOTOCHEMICAL DEGRADATION, SPECTRUM ANALYSIS, TEXTILE NUCLEONICS)

acetate yarn. graft polymerization of acrylonitrile under gamma radiation 8010
composites with epoxy matrix and short carbon fibers under microwaves 7305
composites. damage detected by thermo-acoustic measurement 6005
conductive fibers. absorption, scattering, thermal radiation 7801
contact finishing, measurement of finish evenness with MMP-1 radiation device 4693
Cool Dry System from Fastran Engineering. radio frequency drying 6954
cotton fibers. vat dyed and subjected to ultraviolet radiation before treatment with surfactants and washing 5220
crosslinking efficiency for radiation in ultra-high molecular weight polyethylene 4064
deterioration of nylon 6 fishing net twines after exposure to ultraviolet light 5814
drying studied for absorption behavior, moisture transport, temperature changes 4501
electron beam curing and applications in finishing. German research institutes 2798
electron beam radiation in production of new deodorant fiber by Japan 8549
epoxy, graphite fiber, epoxy graphite fiber composites. effects of ionizing radiation on properties 1827
fabric provides light ray radiation for use in certain medical conditions 5135
fiber orientation control in short fiber composite by loading magnetic moment 6007
finishing. radiation induced modification of polymer solutions 4491 4492
gamma, used with ozone to acidify alkaline finishing waste water for reuse 4764
gamma-ray radiation protection to cellulose etherified with benzyl chloride 8138
gamma. benzoylated cellulose before and after gamma-ray exposure 8137
gelation of carboxyethylcellulose studied by nuclear magnetic resonance 5558
high molecular sulfite cellulose. ionizing radiation effects 8029
inducement of polymerization reactions for coating, finishing, and substrate printing 8443
infrared predrying processes and Monfort's machinery 4502
ionizing radiation. effect on epoxy/graphite fiber composites. mechanical properties 3513
laser radiation action on fibers. basic stages and threshold characteristics 7361
microwave oven. Dylon 4449
microwaves applied to polyacetal rod to make Asahi/Chuo coil springs 1681
moisture content of silk cocoons. testing with microwaves 656
nuclear magnetic resonance and electron diffraction to study cellulose microfibrils 4004
nuclear magnetic resonance. aramid-containing nylon 6 polymers 4034
polyethylene. oxidation behavior due to gamma radiation and ultraviolet light 8101
polymethylacrylate leather coating, modification with radiation, GKZh-94 492
radical induction for copolymeric grafting through radiation 3666
radio frequency drying equipment at Harold Ingram's new dyehouse 2797
radio frequency dye fixing for wool 6883
reactive dye fixation on cotton using microwave heating allows fixation temperature to be reached in five to ten seconds 4437

SC-6 hybrid cotton developed by mutagenizing parent strain with cobalt 5606
silicon and carbon fibers. nuclear magnetic resonance 4655
silk exposed to sunlight. effect on dyeing properties 3308
soft gaskets. crosslinked by electron irradiation 8418
Spectra welding curtain absorbs, filters, and scatters harmful ultraviolet radiation and protects co-workers 3954
synchrotron radiation used to study mesophase transitions in model liquids crystalline polyesters 4694
TGDDM/DDS epoxy and T300/NARMCO 5208 composites exposed to ionizing radiation. effect on mechanical properties 7490
ultra high modulus polyethylene. controlled crosslinking by electron beam irradiation 8104
ultraviolet rays, action during finishing, response of cotton bleached cloth 1905
ultraviolet. bleaching flax and flax-type woven fabrics 3566
ultraviolet. influence on free surface energy of polyethylene terephthalate 4888
viscoelastic properties of silk fibers irradiated with ultraviolet rays 1622
viscose solutions, highly concentrated. radiation treatment to reduce viscosity 4891
X-ray and electron diffraction study of cellulose fibrils from immature cell wall 4003

RADIOACTIVE TRACERS (SEE ALSO OTHER HEADINGS SUCH AS CHROMATOGRAPHIC ANALYSIS, ELECTRON MICROSCOPY, IDENTIFICATION, SPECTRUM ANALYSIS, TEXTILE NUCLEONICS, TEXTILE TESTING)
radionuclide measurement of knitting machine component wear 3863

RADIOACTIVITY, SEE RADIOACTIVE TRACERS, TEXTILE NUCLEONICS.

RAISING, SEE NAPPING.

RAMIE
bleaching with sodium hypochlorite and hydrogen peroxide. fiber degradation. chemical absorption 5176
blend ratio in ramie and cotton yarns. microscopic evaluation 167
China-United States textile trade pact limits export growth for China to three percent annually. details 1571
cultivation, production, processing in India 2429
degumming efficiencies of different auxiliaries 8169
design and manufacture of fabrics 370
dyeing defects in thin fabrics. causes 2745
fabric wearability study 2696
hand analysis with Japanese measuring unit 1616
lignin removal during degumming process 4916
polyester/ramie blended fabrics. Ramzay finishing agent to control itchiness 2790
properties and end uses. cross-sectional and longitudinal SEM views 5618
spinning ramie. new technology compared with conventional processes 6580

RAYON, SEE ACETATE FIBERS, BLENDS, CELLULOSE FIBERS, CUPRAMMONIUM RAYON FIBERS, HIGH-MODULUS FIBERS, TIRE CORD, VISCOSE FIBERS.

REEDS, SEE LOOMS.

REELING
high speed reel, semiautomatic. SITRA 6575
silk cocoon reeling. breakage and filament reduction examined, equations 129
silk. statistical control of evenness 3231
unevenness in filament linear density of silk. formula for production use 4917

REGENERATED FIBERS, SEE CUPRAMMONIUM RAYON FIBERS, HIGH MODULUS FIBERS, PROTEIN FIBERS, VISCOSE FIBERS.

REGULATIONS (SEE ALSO UNDER OTHER HEADINGS, SUCH AS AIR POLLUTION, CARCINOGENS, ENERGY, ENVIRONMENT, FLAMMABILITY, INDUSTRIAL HEALTH AND SAFETY, LEGISLATION, TEXTILE TRADE, TOXICITY, WASTE TREATMENT--EFFLUENT)
airline cabin furnishings made of new fiberglass-CFRP. advantages. regulations limiting heat release 7756
American Association of Exporters and Importers opposes [1987] Textile and Apparel Trade Act 2332
British Nightwear (Safety) Regulations. Shirley Institute conference 1542
Canada announces duty remission plan for imported fabrics. American Textile Manufacturers Institute protests 3160
cotton classing system used in United States 813
Environmental Protection Agency. revised national ambient air quality standards. effects on ginning 7193
fire resistant cargo liners for commercial aircraft. FAA regulations 4347
fire resistant Kevlar composite interior panels for commercial aircraft 4322
flammability. Federal Aviation Administrations rules on fabrics 6776
flammability. impact on upholstered furniture 1427
flammability. use of fabrics. growth market 6384
Germany. stringent laws for release of fluorinated and chlorinated solvents 3741
labeling, United Kingdom 2033
Multi-Fiber Agreement, effect on British importing 2334
New York State code. product liability. building code compliance 7251
solvents, effects West German environmental laws on the industry. recycling developing less harmful solvents 4755
Southern Mill Rules amended for buying and selling United States cotton 7937
Spain. regulatory standards increased for polypropylene production 3292
Superfund Amendments and Reauthorization Act [1986]. control of chemicals used at manufacturing plants 749
Swedish Chemicals Inspectorate recommends ban on diapers containing wood pulp bleached with sodium chlorate due to dioxin presence 3948
tariff quotas proposed to replace Multifiber Agreement and bilateral restraint arrangements 2382
textile analysis methods. EEC directives 7977
Uniform Code Council. Universal Product Codes 2844
United States and Bangladesh. new import restraint limit for manmade fiber sweaters 2365
United States and China. import restraint limit for manmade Category 611 textiles 2369
United States and China. import restraint limits on manmade fiber coveralls from China 2356
United States and Costa Rica. level of restraint for cotton textiles produced in Costa Rica 2362
United States and Dominican Republic. deduction in charges made to restraint limit imposed on [Category 340] 2372
United States and Hungary. adjustment in current limit for some categories of wool textile products 2375
United States and Jamaica. charges deducted with textiles assembled in Jamaica 2352
United States and Korea. restraint limits imposed on some categories of textiles 2361
United States and Malaysia. categorizing silk blend and other vegetable fiber textiles 2374
United States and Maldives. import limits on wool sweaters 2353
United States and Mauritius. bilateral agreement on import restraint limits and transfer of charges 2359
United States and Northern Mariana Islands. reduction on imports of sweater will result in embargo 2373
United States and Pakistan. new export visa arrangement and

exempt certification for some categories of textiles 2354
United States and People's Republic of China. agreement on silk blends and other vegetable fiber textile products 2358
United States and People's Republic of China. export licensing system extended to include sweaters 2351
United States and People's Republic of China. increases in import restraint limits 2370
United States and People's Republic of China. level of restraint for polyester and cotton yarn produced 2360
United States and Philippines. increase of restraint limit on Category 433 products 2371
United States producers entitled to benefits of Special Agricultural Workers Program because cotton ruled fruit 2405
United States tariff schedule in Harmonized System Nomenclature. textile and apparel categories 2355
Universal Standards Agreement. regulates international trade standards 821
wastewater impoundment complies with new California standards. geotextile membranes 1541
West German textile industries and new air quality requirements 3947
West Germany. regulating solvents and other chemicals used in drycleaning 3949
working conditions in sample of Third World and industrialized nations 5487
Worth Street Rules. interpretation and application of defect point count levels 3081

RELON IS A NYLON

RESEARCH, SEE MANAGEMENT, TEXTILE RESEARCH.

RESIN CURING, SEE DRYING, RESIN FINISHING.

RESIN FINISHING (SEE ALSO OTHER HEADINGS OF SPECIFIC PROCESSES, SUCH AS COATING, CREASING AND PLEATING, DURABLE PRESS, WASH-WEAR, WATERPROOFING)
cellulose fabrics and resin finishing. problems and solutions 4575
cotton and cotton/polyester fabrics. attachment of polyethylene glycol. curing conditions 2792
cotton woven fabrics finished with thermoreactive resins 5306
damage to cellulosic fibers due to resin finishing. appearance 4565
deterioration of cellulose fabrics 7712
durable press cotton fabrics with improved performance and low formaldehyde release 1974
dyed finished cotton fabrics. formaldehyde release. effect of pretreatments and dyeing 1975
easy care cotton. garment dyeing potential 1957
garment dyed products. durable press finishing 1253
garment dyeing. NCSU conference report 1206
glass woven fabric finished with coated synthetic resins 1852
graphite fabric T-300 impregnated with Skybond 703 resin. chemical behavior during cure 1144
high performance sandwich panels from resin impregnated braided tubes 4327
interface problem between aramid fibers and matrix resin in fiber reinforced plastics 6496
micellar solutions to apply Hercosett resin and hydrogen peroxide to wool 8547
N-methylol melamine resin with inorganic salts and silicone resins to impart flame, water and rot resistance 1258
photo-yellowing of resin finished silk fabrics, reduction 1960
Procion-resin method. reactive dyeing and resin finishing of fabrics 7582
shrinkproofing viscose rayon weaves 1976
simultaneous dyeing and easy-care finishing of cotton fabrics 1924
thermoplastic amorphous polyimide resin, JD 861, by BP Advanced Composites 1051
viscose woven fabrics. treatment with DMDHEU. effect on physico-mechanical properties 4496
wet-in-wet alternative to dry-in-wet. better properties, energy savings 4493
wet-in-wet resin finishing 2791
wool/cotton blends. improved wrinkle recovery by simultaneous treatment with Synthappret BAP and DMDHEU 1252
wool/viscose fabric. one bath method for acid dyeing and resin finishing 1215
yarns, dyed 6943

RESIN FINISHING AGENTS (SEE ALSO OTHER HEADINGS, SUCH AS CROSSLINKING, TEXTILE CHEMICALS, AND UNDER SUBJECT HEADINGS OF SPECIFIC PROCESSES)
carbon fiber preimpregnated with modified epoxy resins 6315
cotton woven fabrics finished with thermoreactive resins 5306
cotton, reactive-dyed. color changes from DMDHEU 8550
durable press agents. gas chromatography/mass spectrometry analysis 2793
easycare cotton. magnesium chloride catalyst. structural aspects 6142
formaldehyde release markers in durable press reagents 2794
hydrophilic emulsion finishes from acrylic resins, eliminates some undesirable characteristics of synthetics 1967
polyurethane based resins for new finishing effects. research by ROL 6149
polyurethane resins for artificial leather 2716
silicone applied to carbon fiber/synthetic material for flame retardancy in aircraft 8402
silk and silk/rayon fabrics 7647

RETAILING (SEE ALSO UNDER OTHER HEADINGS, SUCH AS APPAREL, CARPETS, FABRIC PRODUCTS, FASHION, HOSIERY, MARKETING, PROTECTIVE CLOTHING)
accessories retail market [1988]. predictions 1339
accessories, increased interest in private label. higher mark ups, weak dollar responsible 2981
American Apparel Manufacturers Association Power Retail Seminar, views on brand names versus private label 2006
Anne Klein II sportswear line. targeting niche consumer and promoting line 1384
apparel fixtures to create individuality and grab consumer attention, various examples 2982
apparel manufacturers, contractors, retailers discuss possibilities for onshore sourcing 5585
apparel sourcing strategies [fall 1988] in Asia market. low volume buying trend, effect on mills and mill prices, knitwear prices 2129
apparel, women's. Units line of square shape knit separates in retailed colors. retail strategies 4602
apparel. flexible manufacturing way of dealing with changes 7676
area rugs, Atlanta [January 1988] floor coverings market 2185
area rugs, [1988] market. trends toward green 2186
bar code scanners at Kids 'R Us. effect on children's wear industry 5426
bar coding and electronic data interchange systems. standards. textile executives discuss advantages 3078
bedding. duvets, great increase in consumer demand 3019
Bloomingdale's and International Wool Secretariat produce commercials focusing on wool apparel 1492
bodywear category sales soar 3767
bridal intimate apparel, successful retail category 6227
British men's wear outsized specialty chain, High and Mighty. company developments, products, prices 2147
Burlington's Lees/Link, direct access computer system for retailers 7036
Calvin Klein opens first store in Dallas 5424
Campeau Corporation to consolidate computer systems for Allied and Federated divisions 7139
Cannon and its Monticello discount label. changes in distribution in retailing home textiles 3088
carpet. American Flooring Association's [1987] Retail Report 1413
carpets. guidelines for moving from residential to commercial markets 3794
cashmere apparel sales [fall 1988] at retail. concerns over price jumps and plans from major department stores 2993

cashmere, price rising in China. changing retailer's buying patterns. apparel products more costly 4008
Christmas [1987] sales for catalogs, department and specialty stores, booming. major women's wear retailers 1385
compromise omnibus trade bill, victories for importers and retailers. industry reactions 3174
computer problems, personal anecdotes 2149
Computers in Retailing Exhibition. changes in retailing concepts 4624
cost of fashion for volume merchants and their resources. upgrading at Target, K Mart, Sears, J.C. Penney's 2983
Crafted with Pride in U.S.A. Council's message at retail level and campaign with Miss America, new commercials 3194
curtains and draperies in new soft alternative window treatments 2178
customer types identified by Management Horizons for apparel retailers 2984
Daniel Hechter Company profiled. product diversification 1493
department stores. effect of mergers, consolidations on consumer's buying habits. industry executives predict no change 2985
dispersion retailing. market segmentation on global scale 1278
Dorothy Perkins retail chain. quick response strategy 3899
earnings [1987] for twenty-four major retailers in third quarter. predictions for fourth quarter 2150
electronic data interchange in retailers' future. according to Meretrends' study. advantages and successful programs 515
electronic home shopping. Telaction, Trintex. various systems 5427
electronic shopping, retailer urged to use caution 5428
electronic, Mervyn's entry. point-of-sale scanners, bar coding, electronic document interchange 2986
England. trade and retail stocks after holidays 2976
flannel sheets, leveling off of market 2190
Floor Covering Weekly's quarterly survey of retailers. market events 632
floral look [spring/summer 1988] women's wear and accessories 1391
Girbaud North America's retail merchandising business 3779
global and dispersion retailing practices. Benetton profile 2151
growth in the department store retailing industry after losses, specialty stores. strategies to regain customers 2987
Haggar and retailers. inventory control 3878
Hills Department Stores' commitment to EDI. reasons and goals 7740
holiday table linen market [1988]. manufacturers' expectations and products 2192
home fashions [1988] buyer's guide lists suppliers and products 2188
home furnishings industry, retailing. changes 7039
home television shopping successful in apparel, especially large sizes 5429
home textile retail [1987] performance, statistical analysis 2195
Hong Kong fashion. difficulty with establishing consumer profiles 2977
hosiery looks [fall 1988] described by major retail buyers 7718
hosiery packaging, trends 1865
hosiery. Sox Appeal specialty chain 1863
Hypermart USA, experiment in mass merchandising. merchandise, product quality, sales volume, and markets 2978
IBM's AS/400 computers for retailers. models, software, introductory extravaganza 7140
impact of Quick Response on major apparel retailers and manufacturers 7670
interior design and product display 1498
inventory glut, market research reports 628
J. C. Penney to open own specialty store for juniors, Mixit. number of units planned. expected sales, merchandise, competition 1386
jeans sales soft in spite of fashion finishes 1383
Krizia, market position in United States apparel retail market. company strategies. foreign licensing 1992
labeling, computer design systems, online with manufacturers, retailers for Quick Response 2972
labeling. bar coded system for Soabar, Print-Apply system specifications 1527
labels, Point of Sale systems for use in apparel field. bar codes and optical character recognition price tags 2032
Levi's Shop, franchise in Leamington Spa. effect on other retailers, future franchising plans 6240
Levi's used barcoded labels to shorten retailers' processing time 6175
licensing agreement between Coors and Lord Jeff, men's sportswear lines under Coors Originals and Coors Light labels 1322
lingerie 8627
loungewear, men's. merchandising 2913
Macy's to install personal computers to quicken pace of stock replenishment for specialty store division 5425
mainfloor mens' wear apparel retailing. rise of designer collections and classifications brands grouped in lifestyle formats 2914
Malina Gerber, designer, manufacturer, retailer of children's wear 2882
market outlook. women's [fall 1988] retail hosiery, bodywear sales. products 5430
mass merchants combining fashion and moderate prices, success in men's sportswear. retail strategies 2988
men's specialty store retailers. orders at NAMSB. [fall 1988] sales outlook 2919
men's wear. dress shirts, dressier styles 1320
men's wear. sportswear offerings [fall 1988]. retailers, merchandising strategies 1327
men's, boys' apparel retail prices increased [February 1988]. United States Labor Department figures, reasons why 2989
Mervyn's department stores. product development, merchandising focus, success in the last decade 4708
Midwest Christmas season and outlook [1988], retailers in good position 2148
Modern Floor Covering's sixtieth anniversary. publishing history. carpet trends 3001
Montreal Pret and Collections International. vendor and buyer reaction 2934
National Retail Merchants Association's annual conference and exposition, computer and software products 2005
Nipon, Leslie Fay merger 1337
Northeast boys' wear retailers report on top selling items, acid-wash 1387
NRMA conference experts warn retailers to start electronic data interchange program slowly. distribution, inventory control 7026
oriental rugs. training program for retailers 3793
Palm Beach Company's Access Software for electronic retailer ordering 7741
Paxar, bar coding and woven labels. company profile 2820
performance of forty-six publicly owned retail companies. details, trends, mixed results 7027
Pillowtex Corporation. company development, merchandising, marketing, and retail strategies, products 2257
Pretendables, children's wear line from Presentables Cinzia 2884
printed T-shirts, market outlook for [spring/summer 1988] 2879
private label programs expand due to trends in men's wear industry 6169
private label, importance in women's ready-to-wear retailers and manufacturers describe market position 2811
projected use of bar codes in department and specialty stores up 8781
Quick Response combined with partnerships to produce competitive industries in textiles, apparel, and retail 698
Quick Response initiative supported by textile, apparel and retail executives 8779
quick response revolution in industry. response to consumer demands 8782
Quick Response system and retailer benefits discussed at AAMA seminar 8780
Quick Response system used by Haggar 6231
Quick Response technology at J. C. Penney 716
Quick Response, electronic data information systems, and bar

coding programs in retail and vendor communities. review 4517
Quick Response, importance for manufacturers who want to reach retailers 502
Quick Response. challenge to management 3093
reorders [1987] for men's outerwear up from [1986]. companies discuss their sales position 613
retailers use Hanes' Quick Response system. increased sales without increased inventory 8777
salesman's role in consumer selection of fabric 1425
sheets. retailing strategies 3026
shirt and tie business, strategies to boost lackluster sales. trends seen at NAMSB 2916
shirts, sport. survey of eleven mass merchants and their sales market. sales figures. purchases among different age groups 2917
short skirts and other popular designer items selling at retail 2152
ski apparel manufacturers' expectations [1988-1989] season. Ski Industry America Show 3780
slacks and jeans casual strong sellers at major mass retailers during holiday season 1319
sportswear sales. retailers describe [fall, Christmas 1987] sales and merchandise 629
sportswear, continued growth in specialty stores. retailers discuss market position, and merchandising mix 2921
Steve Sakamoto and Market Research Active Sports. tracking beach lifestyle fashion trends for retailers 2804
suits wool, men's. retail reaction to higher wool prices 1388
suits, three button, style trend in tailored clothing market. retailers describe their product lines 2923
survey of major West Coast retailers, developments in knitwear 7028
table linens at retail, item-oriented displays 3027
table linens. market trends, sizing, fabrics, category market share, assortment composition 2197
tuxedos, rental versus bought in formal wear industry 8624
underwear, panties. preferences in styles, fabrics. buying habits 8636
United States shop towel suppliers listing. sizes, fabrics, colors, delivery time 2199
Universal Product Code, varying approaches to implementation of technology. J.C. Penney's and others 2979
universal product codes used in hosiery industry. advantages, packaging placement, department store use 1867
Van Heusen. Custom Club International and Crown and Cross cotton dress shirt lines 1316
Wal-Mart profiled, success of washed denims. sales 2980
weather and shopping relationship revealed by statistical study 5591
Williamson-Dickie, UPC ticketing. three year phase-in program, benefits 6176
window coverings, delicate. consumer demand drives up sales 6257
women's intimate apparel, marketing trends. Du Pont fabrics 8626
women's sportswear manufacturers. [1988] projections. major trends and industry plans in difficult retail environment 1344
women's wear. designer offerings [summer 1988] for a short season 1347
young men's apparel. strategies to cope with higher wholesale prices [fall 1988]. buying strategies and purchases 2990
young men's wear, retail outlook [fall 1988] gloomy 2929
Zoom Videos' low cost fashion videos for apparel companies 6963

RETTING, SEE DEGUMMING.

REVIEWS, SEE ANNUAL REVIEWS, BIBLIOGRAPHIES, AND UNDER SUBJECT HEADINGS OF SPECIFIC SUBJECTS.

RHEOLOGY, SEE POLYMERS AND POLYMERIZATION, AND UNDER SPECIFIC MATERIALS.

RHOVYL IS A VINYLON FIBER.

RIBBONS, SEE NARROW FABRICS.

RINGS AND TRAVELERS
coefficient of friction between yarns and contact surfaces 4140
Nitro-Dur-Micron nitride steel flange rings have long lifetime 8171
polyamides and steel compared in production of travelers 1698
spinning process for high speed spinning of fine wools, Cerifil 7375
wear rate and wear coefficient of ring. shortened wear life 134
wear. method for accurate determination of wear on spinning and twisting rings 135

ROLLS (SEE ALSO OTHER HEADINGS, SUCH AS CALENDERS, DRAFTING ROLLS, AND SUBJECT HEADINGS OF SPECIFIC MACHINERY)
mid-fastened. Kleinewefers Vari-Flex and its operation with other roll systems 8441
program for ideal pressure between rollers and fiber to eliminate deformation 4722
rubber roll coverings for slashers. status and outlook 1738
simulation of abrasion, deformation, rigidity, strength, torsion, tension 4711
spinning rollers. covers 2516
twisting-stretching machines with rolls having ceramic coatings. change in temperature conditions of operation 4949
winding warp yarn equally onto rollers 4169

ROPE (SEE ALSO OTHER HEADINGS, SUCH AS CORDAGE)
inductive transducer tests change of length due to extension 6285
jet. machines and technology. emphasis on rope processing 8511
low tex yarn. trial production 1699
wire tethers for use in space 2539

ROTPROOFING (SEE ALSO OTHER HEADINGS, SUCH AS ANTIBACTERIAL AGENTS, FUNGICIDES, MICROBIOLOGICAL DEGRADATION, WEATHERING)

ROTPROOFING AGENTS, SEE FUNGICIDES.

ROVING (SEE ALSO OTHER HEADINGS, SUCH AS DRAFTING, DRAWING, SPINNING, UNIFORMITY)
core spun PAT-M/300, for flame retardant PVC conveyor tapes 2200
cotton and cotton system wastes. blending, roving, open end spinning, yarn uses 4097
irregularities. continuous sampling method compared to random sampling 2234
KSL (S. M. Kirov Institute) device for fiber orientation, straightening tests 4087
mechanics, structural. double roving feed yarn 6573
Owens Corning bulked roving product. manufacturing process 5740
VEB Textima's improved spinning frame flyer for more constant roving qualities 3340

ROVING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS DRAWING MACHINERY)
GC series of drafters, FM-7A rover for wool fiber, performance evaluation, operational recommendations 4086
new L2-50-1M cotton rover, design changes and abilities 4093

RUBBER (SEE ALSO OTHER HEADINGS, SUCH AS ELASTOMERS, RUBBER PRODUCTS)
fiber reinforcement of polymer compositions, compatible plasticizer. experiment to test discovery 1682
toughened epoxy resins 6006

RUBBER PRODUCTS (SEE ALSO OTHER HEADINGS, SUCH AS INDUSTRIAL FABRICS, TIRE CORD)
tire cord adhesion testing. samples prepared by cold bonding 6325
tire cord adhesion testing. samples prepared by hot bonding 6326

RUBBER YARNS, SEE ELASTIC YARNS.

RUGS, SEE CARPETS, TUFTED CARPETS.

SABLINA IS A POLYESTER FIBER.

SAETERI IS A HIGH MODULUS FIBER.

SAFETY, SEE INDUSTRIAL ENGINEERING, INDUSTRIAL HEALTH AND SAFETY, NOISE, PERSONNEL MANAGEMENT, TEXTILE MACHINERY, AND UNDER SUBJECT HEADINGS OF SPECIFIC MACHINERY.

SALES, SEE MARKETING AND UNDER SPECIFIC SUBJECT HEADINGS.

SAMPLING (SEE ALSO OTHER HEADINGS, SUCH AS STATISTICAL METHODS, TEXTILE TESTING)
CAD. uses in design and sampling of fabrics. limits of the system 7872
high resolution Create Design EX by Ernst Benz. reproduction capabilities 7875
piece dyeing of woolen fabrics. reliability of sampling 8471
three dimensional CAD by Gould and Sophis Italia. capabilities if developed 7892

SANITARY NAPKINS AND TAMPONS (SEE ALSO OTHER HEADINGS, SUCH AS DISPOSABLES, HEALTHCARE AND MEDICAL TEXTILES)
absorbency. distribution mechanisms 6073
absorbent characteristics of nonwovens. fluids 6076
Acumeter Coating/Laminating Tape system. silicone release paper 2954
barrier films, monolithic breathable 6055
bonding, calender. Meraklon fibers from Terni 5091
market analyzed. factory sales and share by segment and manufacturer 2991
private label over brands, trends 3036
production adapted to materials and machinery in Poland 4290
Sharnet's nonwoven, non-adhesive webs for feminine napkins 2615
superabsorbent polymers, manufacture and applications, future expansion 1086
testing performance characteristics 4691
thinner products. super absorbent materials. factors affecting product quality 300

SARAN FIBERS

SCOURING (SEE ALSO OTHER HEADINGS, SUCH AS DETERGENTS, LAUNDERING, WASHING)
alkaline and acidic processes with anthraquinone catalyst for flax/polyester 4095
atmospheric versus pressure scouring of fabrics 6841
cotton fabrics. preparation for dyeing 6089
cross staining of wool yarns. methods to minimize 2751
cross-staining of dyes during yarn wet processing. chemical setting 1177
CSIRO Lo-Flo scouring process and modified liquor flow in effluent treatment system 4094
CSIRO scouring trials and results. symposium of new approaches to wool scouring 4413
effect on fabrics exhaust-dyed with dichlorotriazinyl dye and finished with DMDHEU 3597
energy cost, choice, advantages of natural gas 5619
faulty scouring as a contributor to uneven color results in dyeing 6861
low solvent-assisted process combines desizing, scouring and bleaching 6826
modified suint scouring with nonionic surfactant and alkaline builders 8462
polyester textured woven and knitted fabrics. processing sequence 6820
raw wool. control of liquor quality 1193
silk, raw. effects of scouring in composite spun silk yarns 1621
sodium chlorite for combined scouring/bleaching of polyester/cotton fabrics 5184
Streat Moisture Meter measures regain of loose wool emerging from dryer 8461
Vaporloc from Mather Machinery. pressure scouring for polyester blend fabrics 5185
Waikato Wool Scour. benefits of incorporating extra feedhopper and roller prior to dryer. compared to cost 3576
wool processing for dyeing at lower temperatures 8498
Wool Research Organization of New Zealand develops FLOCOM process to improve quality control 6840
wool scouring industry in New Zealand 2703
wool scouring. dynamic membrane treatment 4768
wool scouring. new WRONZ pilot facility. testing and optimization of scouring 7574
wool with Freon TF solvent 8463
wool. closed circulating scouring system 1913
wool. developments over last forty years. wastewater treatment, opening 4010
wools. ureas and means for improving process 4022

SCOURING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS FINISHING MACHINERY, WASHING MACHINERY)
centrifuge feed rate in wool scouring. automatic control 8465
continuous preparation range from Babcock, singeing, desizing, scouring, bleaching. operational details 6844
ITMA [1987]. wet processing machinery 1237
Mather Machinery's Vaporloc for atmospheric pressure scouring 8464
mini-bowl scouring system, research in New Zealand 2703
Serracant's tow dyeing, steaming, and milling/scouring units 6094
Shocksteam from Asisa. simultaneous scouring and bleaching of open width fabrics 8452
Siroscour system developed by CSIRO for Australian wools 1914
solvent scouring/aqueous carbonizing machine tested by Bianchi in Italy 6828
solvent system, Antrasol. Antarco 6131
Super Scour and Bleach Plant from Calico 1189
Vaporloc from Maher. bleaching and scouring cotton and polyester blends 6087
Vaporloc from Mather Machinery. pressure scouring for polyester blend fabrics 5185
Vaporloc from Mather Machinery 6088
Vaporloc pressure scouring system from Mather Machinery for cotton fabrics and blends 6842
wool scouring. new WRONZ pilot facility. testing and optimization of scouring 7574
wool. closed circulating scouring system 1913
wool. developments over last forty years. wastewater treatment, opening 4010
wool. package-to-package scouring and chemical twist setting machine from WRONZ 6484

SEAMING (SEE ALSO OTHER HEADINGS, SUCH AS FUSING, SEWING, SEWING MACHINERY)
adhesive seaming, high speed method with less exposure to heat 5383
advantages and disadvantages of two types of heat sealers for watertight seams. radio waves, high temperatures 6190
geotextiles. optimum bonding, stitching and seam formation 7680
mechanics of different seam types and their applications 3724
Sandolub auxiliary for friction reduction 5088
sewing aids from Atlanta Attachments for bias cut bands 7694
ultrasonic seaming of nonwoven products. project at Shirley Institute 8608
ultrasonic seaming. developments at Textile Technology Forum 1796
ultrasonic textile welding. theory and machinery. advantages 2036

SEAMS (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL MANUFACTURE, SEWING, SEWING THREAD)

A. Twill jute bags sewn with overhead and safety stitches. correlation between strengths of seams and weftway cloth 1290
breakage reduced using air entangled polyester thread during aftertreatment 1349
effects of abrasion, stretching, ironing on waterproof apparel seams 6196
four-needle oversew and linking machine. Mathbirk 8305
fraying in woven fabrics. prevented by edge finishing and interlining tape 3522
geotextiles. optimum bonding, stitching and seam formation 7686
limited-use protective clothing. fabrics. construction 4622
mechanics of different seam types and their applications 3724
ring twisting. effects of operating parameters 8203
seam slippage. men's suiting fabric. effect of fabric structure and mechanical properties 8609
seam tensile behavior. analysis. computer program 3128
slippage in woolen fabrics 3711
software and electronic tensile tester for testing strength of lockstitch seam 1503
thermal processing, suitability of nylon adhesives 520
Type LF613K100HR-9 three needle high throw flatbed for seaming on medium to heavy weight denim 2041
types for waterproofed apparel, ensuring watertightness 5384
woven and knitted fabric seam strength. factorial study to investigate breakage mechanisms 1291
yarn separation in seam areas, test method, causes, stress level 5470

SELLING, SEE FASHION, FORECASTS, MARKETING.

SELVAGES
floats. defect origins in warp handling and weaving technique 8255
influence on loom performance and cloth quality 6661
interweaving of warp threads in selvages, computerized control 1767
leno motion for interlacing cut selvages on shuttleless looms. Grob Mirobor 5882
Mirobor manufactured by Grob. leno selvage device 3449
narrow fabric loom latch needles. selvages and loads 7166
problems in shuttleless weaving. treatment in ribbons, veils, scarves 5886
prosthetic ligament woven without selvages to eliminate irritation 1855
yarn stress influence on weaving machine performance and cloth quality 4213

SETTING (SEE ALSO OTHER HEADINGS, SUCH AS CREASING AND PLEATING, CRIMPING, DURABLE PRESS, SHRINKPROOFING, STEAMING, TENTERING, TEXTURED YARNS)
Brueckner's new tentering, drying, and setting machine with horizontal chain reversal 7656
carboxylated and phosphonated reactive dyes. fixation on nylon fiber substrates 426
cotton. cellulose degradation during prolonged heat treatment 3558
dye setting cotton fabrics dyed red 469
effects of heat transfer on hard-twist yarn 8577
Exxon to purchase ICI's geotextile division and Terram-producing plant 6549
Fleissner. manmade fiber production machinery 5743
Fleissner. thermobonding and binder bonding assembly 5954
heat exchange between yarns and contact surfaces 4959
heat setting polyester. influence of variables on the absorption of iodine 6605
heat setting with infrared radiation through gas combustion 8510
heat setting. effect on textured polyester and dye uptake in carrier and HT dyeing 6865
heat setting. influence of temperature and length of treatment on acrylic/polypropylene yarn characteristics 7385
heatsetting coated fabrics 1074
Interplastica's Termoplast heat setting machine for thermoplastic nonwovens 2800
ITMA [1987]. Unilap from Rieter 4124
Kieber Model 2000 and 64 pleating machines and DS Model Bello steam chamber (Trade Lit.) 8576
metalized Nitron fibers. heat treatment and humidity effects on electrical conductivity 7360
near-infrared determination of nylon carpet yarn heat setting method 7067
nylon 6 heat set carpet yarn. tension effects. thermomechanical analysis 966
PET fibers. affected by heat setting. crystallinity, birefringence, stress-strain behavior, thermal shrinkage 7384
PET fibers. effects of heat setting on crystallinity, birefringence, stress-strain behavior, mechanical properties 7331
polyester fabrics. source of irregularities in heatsetting 1988
pretreatment of knitted fabrics. machinery 401
raschel velours. finishing guidelines. preparation, cleaning, pre-shearing, polishing, heat setting 3674
reactive dyeing of wool. slow fixation at low temperature 429
Suessen heat setting conditions. influence on thermal stress analysis measurement of carpet yarns 964
Superba. modified heat setting apparatus to accommodate continuous dyeing systems 497
tentering machinery. optimum duration for drying, heat setting, curing fabrics 8581
textured carbimide yarns. heat treatment effects on properties 8219
thermofixing of false twist, stretch textured, polyester yarns. crimping properties 4138
wool dyeing with phosphonated and carboxylated reactive dyes. fixation 1930
yarn stretching and heat setting. heating of synthetic yarns 3382
yarns, BCF carpet. HBS-T heat setting unit from Hirschburger 5803

SETTING OR FIXATION OF DYES, SEE UNDER SUBJECT HEADINGS OF DYEING, PRINTING, STEAMING.

SEWING (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL MANUFACTURE, EMBROIDERY, QUILTING, SEAMING)
adapting [1929] women's dress for contemporary use 5363
apparel designed according to architectural principles 4522
automated Eton 2002 system for optimal efficiency in cutting and piecing 7887
Bobbin Show [1987]. needle trades. United States industry trends 542
buyers guide. embroidery, pleating. machinery and services 538
collars. sewing one piece collars which resemble two piece collars 1350
collars 1280
computer control and program of sewing machinery 4552
computerized designs converted to sewing patterns. image processing 1351
correcting commercial patterns for women's pants to improve fit 5366
correcting women's pants to improve fit 5365
couching for textile conservation 2852
damage prevention with Sandolube products 8610
damage, Sandolub auxiliary for friction reduction 5088
damage, solutions at SEAMS show by Sandoz Chemicals. softeners, lubricant 4553
Eastern European product consumption and production times, comparison during apparel production 555
Eton's new automatic cutting system with transport to sewing station 8791
fabric and sewing machine interaction, study at North Carolina State University 557
feather motifs in handmade quilts 2846
forces encountered by needle and presser bars at high speeds 7098
helical model of the plain stitch, relation to fabric thickness 1778
hems. hand and machine worked 2823
home sewing machine equipped with needle thread positive feed mechanism, feasibility discussed 2037

industrial fabrics. making-up trends 6191
Janine Gallimard. classical milliner specializing in bridal millinery 4520
Juki ADU-332 sewing unit. pleats 3726
Just-In-Time applied to sewing line 3879
knit fabrics. fabric characteristics 2039
knit fabrics. testing and improving sewability at high sewing speeds 2038
linking systems for knitted goods making-up 6986
Lycra/wool fabrics. cutting, marking, lining, and sewing methods 556
matching plaid fabrics without pinning or basting 4526
mechanics of different seam types and their applications 3724
modified waterfall pillow. construction and application 3023
mohair and wool worsted suiting fabrics. performance during making-up 7678
needles, heat build-up. relation to speed, material thickness and surface density 8645
needles. measurement of force applied. factors affecting fabric penetration force 2040
overedge, cover, and safety stitch machines. Class 500 and 600 stitch types 2044
patch pockets 5386
pinch pleat drapes. manufacture 3024
plaid fabrics in apparel manufacture 4525 4527
plain edges. overseaming and blind stitch sewing machines 558
PMTS motion/time systems for sewing industry. Peter Evans' CME 5385
Profeel manufactures Zippy assembly guide 3727
raincoats, waterproofing without coating 7680
sewability, tests 4386
slopers. customizing commercial fitting patterns 2825
smocking contemporary apparel 7692
Spossa Bella. custom bridal gowns 4521
stitching technique. machine and operator factors 8611
systemization of techniques 8612
techniques for knit fabrics on zigzag machines 7689
time study of sewing operators 5391
types for waterproofed apparel, ensuring watertightness 5384
ultrasonic textile welding. theory and machinery. advantages 2036
VEB Kombinat Trikotagen's improved contour, overlock and double chain sewing stations for lingerie and fine knits 3725
woven cotton fabrics, willowing and deformation. use in nonwoven linings 4680

SEWING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS EMBROIDERY MACHINERY, QUILTING, SEAMING, STITCHBONDING MACHINERY)
air nozzles implemented at Jaymar-Ruby sewing plant. lowered noise level and cost improvements in downtime 1537
attachments for sewing upholstered items, bias cut bands from CF Italia, Atlanta Attachments 7694
automated control modules 5369
automated sewing machinery produced at Schips for assembling trousers, pockets, automatic label attachers 2848
automated system, Japan research and development project 2013
automation. knitting machinery. ITF-Maille. advantages and disadvantages 7132
bend needle and looper mechanisms. sensitive-coefficient spatial linkages, role in machine design 8824
blind hemming. 2800 H-3A from Union Special 8593
blind stitch and overseaming. plain edges 558
Bobbin Show and Linkage Expo I for retailers. new machinery and production methods 6392
Bobbin Show [1987]. improvements, developments 566
Bobbin Show [1987]. sewing highlights 561
Bobbin Show [1987]. sewing, embroidery, pattern, cutting machinery. unit production and factory systems 562
Bobbin Show [1987]. special purpose equipment 559
Bobbin Show [1987]. work aids and attachment devices 560
Bobbin Show [1988]. emphasis on electronic linking 8966
Britain's Clothing Technology Center. research funding and projects 563
Brother BAS 600 unit for pockets. working at the CNCV plant in France 6988
chain cutter, power AIR-KLIPP by Union Special. installation on 500 and 600 Series flatbed machines 2838
chain stitch sewing machine, kinematic analysis of take-up spring 7170
collarette machine from Union Special, Style LF632K200MV-12 unit 2042
Cologne Show [June 1988]. apparel manufacturing machinery on display from Union Special 4554
electronic stitching, advances, applications 2046
embroidery. variables in the process. experiments 2026
five 600 series sewing machines from Union Special 4518
five centered cam operated device for needles in zig zag sewing machinery analyzed 4557
forces encountered by needle and presser bars at high speeds 7098
four-needle oversew and linking machine. Mathbirk 8305
home furnishings. technical advances 8605
home sewing machine equipped with needle thread positive feed mechanism, feasibility discussed 2037
hooks. classification system. use. problems 4558
IMB. Rockwell-Rimoldi, Pfaff-Pegasus sewing machines for underwear 6991
industry. mergers and acquisitions in the industrial sewing machine market 7695
ITMA [1987]. garment manufacturing equipment highlights 8613
ITMA [1987]. making up and packing machinery 6185
ITMA [1987]. Rockwell Rimoldi sewing machinery 7693
JIAM [1987]. apparel make-up machinery 525
JIAM. Avix Laser Cutting System, Seiko Sewing, Auto Pocket Welter from Satoh Seiko, Consew International 1292
Juki ADU-332 sewing unit. pleats 3726
Juki America's Quick Response sewing system unveiled at Bobbin Show. components 6989
Kellwood Company's Altus plant uses Union Special sewing machinery, plant operations 5367
latchtacking. 2800 LTA series from Union Special 8595
Lectra Systems' machinery at New York Hilton show. electronic pattern scanner, Rockwell-Rimoldi machines 6166
Leipzig Autumn Fair. Textima exhibits 1524
lever operated gear deflection device for the 75A zig zag sewing machine 4559
lockstitch and chainstitch sewing machines for industrial fabric products compared 6197
memory on automated footwear sewing machinery increased 723
modernizing the sewing room, automation, retrofitting 709
needle blanks, single automated operation due to new technology 5359
needle technology. Groz-Beckert developments 4156
needles, heat build-up. relation to speed, material thickness and surface density 8645
needles, structured surface. manufacturing 6794
needles. heating and cooling mechanisms. optimum geometry and surface structure 2043
new Pfaff business location in Paris, new sewing machine models. sewing machine from Mauser Special and Beisler 2849
overedge, cover, and safety stitch machines. Class 500 and 600 stitch types 2044
overseaming and blind stitch. plain edges 558
Pfaff sewing machinery, computer integrated 6990
products from Eastman Machine Company and various divisions shown at Bobbin Show 1293
Profeel manufactures Zippy assembly guide 3727
puller drive assembly on Union Special Series 500 and 600 flatbeds. maintenance, lubrication 2045
Quick Response, approaches taken by three manufacturers. The International Technology Award for clothing technicians 564
regular maintenance of sewing machine motors 5533
Rimoldi's special exhibition displays machinery in Milan 3728
Rockwell-Rimoldi. sportswear and swimwear 8646

second generation electronic sewing machines from Union Special, Mitsubishi, and Investronica on display in Lille 2850
sewing units. new. programmable. electronic control 6198
Shenkar College's robotic sewing system for apparel production 7681
side roller presser foot. ST-type. Shimada Machinery 8615
sleeve hemmer. 2800 SBH-1A automatic from Union Special 8599
spring compensator. method to calculate parameters based on tension of the thread 4560
Stedman Corporation, automated sewing equipment from Union Special 5387
Step-Back Trimming Device from AMF Clarbro for production of sewn sub-assemblies 4555
Style 2800 CU automatic rib cuff setting station from Union Special 4556
survey of equipment from various companies. Juki, Kobe 5389
swimwear manufacturing by Raj Manufacturing. facility, equipment 7725
technological advances at IMB [1988]. machinery highlights 6199
Textima series 8431-8434 double chain stitch 8614
Textima, Elitex, Pannoniya sewing machinery introduced [1988] 5388
thread measurement. Vertex Engineering system, elasticity compensation 7696
thread plow eliminates hanging threads while sewing trim covers and lace 8616
torque settings, procedures for Union Special 600 series sewing machines 5390
Toyota's Total Sewing System installed at Sweden's Top-Print Inc. reasons behind choice, problems, results, successes 565
TRASS sewing systems developments [since 1983] reviewed 3707
Type LF613K100HR-9 three needle high throw flatbed for seaming on medium to heavy weight denim 2041
Union Special sewing machines for denim, knitwear, pants and gloves 2847
wet suits and divers' suits. manufacturing machines, dropper device for hemming ladies' jackets 1294

SEWING THREAD
American Thread Company, profile. management, marketing, facilities, equipment 6557
Bobbin Show [1987]. core, spun polyester, filament, cotton, monofilament, and specialty threads 567
diameter coefficients 2540
Digicone. Schweiter VTA Stretching-Stabilizing Winder 4134
Epic sewing thread by the MEZ company. factory-based cotton and polyester yarn spinning facilities 3322
friction. parameters for thread passing through linear and radial areas of friction. model 4141
high performance sewing threads for protective clothing 7393
IMB [1988]. highlights 8587
industrial sewing thread manufacturers' high tech products. industry mergers, import problems, domestic market sales 3393
ITMA [1987] trends. winding machines 993
marine canvas products 7394
measurement on sewing station. Vertex Engineering system with elasticity compensation 7696
model of damage caused by friction to cotton thread in various environments 4660
outdoor fabrications. core, polyester and acrylic continuous filament 568
polyester reinforced cotton, uses, properties 4973
polyester. air entangled thread to prevent seam breakage during aftertreatment of jeans 1349
polyester. physical, chemical, dye properties 3307
polyester. replacement of cotton, emergence of air-textured yarn 8214
produced from fiber processing wastes. suitability 158
reinforced and cotton types in protective clothing. resistance to harmful substances 172
seam slippage. men's suiting fabric. effect of fabric structure and mechanical properties 8609
Soviet Union, yarn and sewing thread production 105
Zollern-Vertrieb ten color, auto-doff thread winding machines 3422

SEW-KNIT FABRICS, SEE STITCHBONDED FABRICS.

SHEARING
Comet's Apelle shearing machines. modular design 5333
computer control system, speed and periodic action control 4504
Schlenter. shearing blades 5535

SHEARING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS CUTTING MACHINERY)
Comet's Apelle shearing machines. modular design 5333
device for smooth and pile fabrics from Ivanovo Textile Institute 498
fabrics. Vollenweider Type PMD Super Duplo 8578
Horizon shearing machine from Sellers. computer control and monitoring 2629
Optima series pile shearing machine from Vollenweider. used by Grober in high pile knitting operation 4261
Schlenter. shearing blades 5535
Vollenweider's Optima 4417
Vollenweider's Pyrotrop singeing machine for open and tubular knit fabrics 4415
Vollenweider's Super Duplo Scantex cloth cleaning and shearing machine with automatic inspection 4414
Vollenweider's Super Duplo with automatic cloth inspection and Peerless 4416

SHEDDING, SEE LOOMS, WEAVING.

SHEETS, SEE FABRIC PRODUCTS, HOME FURNISHINGS, SURGICAL PRODUCTS.

SHOES, SEE APPAREL, LEATHER SUBSTITUTES.

SHRINKAGE (SEE ALSO OTHER HEADINGS, SUCH AS FULLING)
acrylic fibers. shrinkage in process of stabilization. testing and results 7296
compressive shrinkage machine, for knitgoods. Toptex-W from Monforts 5328
cotton woven fabrics finished with thermoreactive resins 5306
fabrics during cooling stage, compared with behavior of solids 1843
felting shrinkage, procedures to avoid this when drycleaning wool garments 4570
importance of testing for shrinkage in garment dyeing 8508
knit fabrics. Sanfor process. problems and solutions 6161
knitgoods. influence of take-off 8293
polyacrylonitrile/nylon, viscose/nylon carpets, shrinktesting 642
polyester knit net fabrics, uses, heat stabilization 5330
polyester yarn. shrinkage variation obtained by varying temperature of heating roll on stretching apparatus 171
polyester, shrinkage increased in the drawing stage, decreased in the finishing stage 4896
preshrinkage mechanism by rubber blanket shrinkage machine. formula for calculating preshrinkage 371
procedure for submitting item to International Fabricare Institute's analysis department for shrinkage analysis 5403
reduction of tubular knit fabrics with Paknit II compactor 8579
residual shrinkage in knitwear caused by solvents. minimized with new drum machine 8431
Starfish measurement system for knit fabrics. origins 5916
testing methods for fabrics dimensional instability evaluation 5467
Topsoft, process to keep wool soft during processing with shrink-resist polymers 6560
Tre-Relax from Mohr. shrink dryer for tubular and open width knit fabrics 5322
Video Shrink Inspector manufactured by Sick Optik-Electronik. measures fabric shrinkage after processing 7076
VSI Video Shrink Inspector measures changes in fabric shape. optical pattern recognition 5466

woven fabrics. methods for calculating 667

SHRINKPROOFING (SEE ALSO OTHER HEADINGS, SUCH AS CROSSLINKING, DURABLE PRESS, SETTING, WASH-WEAR)
cotton fabric creaseproofing and shrinkproofing, new NKK catalyst, effectiveness 484
cotton woven fabric, method to apply liquid ammonia 483
equipment for knit fabric finishing at [1987] ITMA 7562
Hoechst's modified glycol, non-formaldehyde shrinkproof finishes for cotton fabrics 482
improvements to overcome effects of tumble drying cotton knits 6164
N-methylol/sodium fluoroborate shrinkproof finish for cellulose fabrics, tests 4487
parameters for glyoxal use instead of formaldehyde, catalysts, processing 4497
pigment dyeing and shrinkproofing, combined method using TP dyes and liquid ammonia 423
sodium bisulfate. uses for conferring antifelting properties on wool 2783
Superba WP/FU steaming/shrinking machine for high bulk acrylic yarns 3678
Superwash certification mark from Wool Bureau indicating washability 3750
vat dyed cotton/polyester knit fabrics, effects of shrinkproofing on dyefastness 6944
viscose rayon weaves. stress relaxation of fabrics. resin finishing 1976
viscose/cotton woven plush fabrics 485
washability tests from International Wool Secretariat 7086
wool fabrics. machine washable printing 2775
wool. felting. nucleophilic reagent/cationic surfactant/cationic resin mixture 2795
woven cotton/polyester fabrics with liquid ammonia, tests 486

SHUTTLES (SEE ALSO OTHER HEADINGS, SUCH AS LOOMS, PICKING AND PICKER STICKS--WEAVING, WEFT MECHANISMS)
interference of shuttle upon entering or leaving shed 5030
kinematic and dynamic parameters of striking mechanism. possible increased speed 1762
microshuttle mechanism. mathematical model 1763
shuttle-flight conditions, variation with loom speeds 1013

SIBLON IS A HIGH MODULUS (RAYON) FIBER.

SILENKA IS A GLASS FIBER.

SILK (SEE ALSO OTHER HEADINGS, SUCH AS TEXTILE TRADE)
abrasion resistance, morphological changes after chemical modification 8002
acid dyeing with sodium n-alkylsulfates 3652
acid dyes, single and binary mixtures. time adsorption isotherms determined 1927
aldehyde treatment for sericin fixation 8551
amorphous region of fibers differences in fine structure. analyzing acid dye properties in relation to silkworm varieties 1209
art. Maria Multhauf's landscapes. dyed silk fibers on wool 4628
batik on silk cloth. Joachim Blank's art 4629
blends, China-United States textile trade pact limits export growth for China to three percent annually. details 1571
Bombyx mori silk fibroin. structural changes by drawing 23
Bombyx mori silk fibroin. three models for silk I structure based on X-ray diffraction 24
Bombyx mori. cross sections of filaments observed by electron microscopy 22
bulk yarns in men's wear 8227
bulkiness modification of silk fiber by freeze drying 6475
Central Silk Technological Research Institute. major research divisions 830
China's silk industry, cocoon price war and other problems 831
China's silkworm cocoon shortages threatens garment output. government controls panic buying 7233
China. production technology reforms and breakthroughs 4989
chitosan. effect on physical properties and colorfastness of dyes 3653
cocoon filament. mechanical properties and breeding effects 8003
color measurement. increasing software speed 682
Comomoda collections of silk fabrics 2647
comparative study of physical and chemical characteristics in silk from China, Brazil and South Korea 7800
computer testing, parameters for quality 5457
converting the KF shuttle silk loom to water jet looms, potential and problems 4186
crepe, georgette, chiffon fabrics. parameters and specifications 5128
crosslinking reaction with bis(beta-cyanatoethyl) disulfide 1617
damage. chafing on fabrics. causes and solution 4482
degradation of silk fibroin, method of estimation 766
degumming mixed silk, nylon 66 fabric 8456
degumming reagents, influence on rate of dyeing with acid dye on silk 1958
degumming with soap and synthetic agents 4070
degumming. possibilities for automation of process. laboratory results 6845
deteriorated silks evaluated with scanning electron microscopy and energy dispersive X-ray spectrometry and dye analysis 7283
drape. effect of mechanical properties on drape of silk and manmade fabrics simulating silk 1603
drycleaning care procedures 6995
drycleaning. discussion of basic fibers 2434
dyeing behavior of silk/nylon 66 blend fabrics 6932
dyeing silk fabrics with aqueous extract from raw leaves of ilex pedunculoso miquel 1959
dyeing, compared to wool 6466
dyeing. silk and nylon 66 blends 5219
evenness during reeling. statistical control 3231
fabric definition, printing technique 5290
fabrics composed of methacryl amide grafted silk fibers, mechanical properties 1618
fabrics popular with women's innerwear designers 4605
fibroin crystal. analysis of structure by X-ray and electron diffraction methods 3232
fibroin fibers modified by mono- and bi-functional epoxides. properties 25
fibroin films, regenerated. effect of structural changes 825
filament fibers in Poland, natural and manmade, trends toward natural fibers 4002
finishing with blended resins 7647
fourteenth and fifteenth century London women employed in silk weaving 1009
freeze drying. effects on fiber properties 1619
fungus protection for yarn dyed silk fabrics 6942
gypsum as soluble retardant in dyeing 6882
Hosa Mysore and Pure Mysore, India. comparison of silk fiber properties 6474
looms. pick movement 6662
market outlook. increased prices, China and India exports, fashion trends 2430
methacryl amide-grafted. thermomechanical properties 1620
moisture content of cocoons. testing with microwaves 656
Parylene-C polymer evaluated as coating for fragile, degraded silk 7281
photo-yellowing of resin finished silk fabrics, reduction 1960
photodegradation of silk with metal complex dyes. effect of metal concentration 7597
ply yarns. influence of steaming parameters on properties 5794
prices for People's Republic of China silk apparel, fabrics increase 7946
production, molecular structure, relation to fiber characteristics 4011
reactive disperse dyes. exhaustion and fixation 3654
removing chloride salts from silks 3740

Rhone-Poulenc produces Setila polyester. silk substitute 7348
sarees of Kancheepuram, India. history, tradition. silk types 8622
scarves. tremendous increase in popularity 2123
scouring effects of raw silk in composite spun silk yarns 1621
silk fibroin crystals. effect of copper on crystal form 26
skin, hair, silk discoveries lead to data on animal breed types used for manufacture of parchment and textiles 7956
spider silk, gene holds secret to high tensile fiber. PA Technology team investigates 6524
spiders. properties, varieties, and applications 832
spotting procedures for silk. types of stains, wet and dry spotting, alkaline color changes 6211
stabilizers tested to stabilize silk to light and heat 7282
steaming cocoons to improve appearance of raw silk after processing 6476
sunlight. effect on dyeing properties 3308
SW mark by Ratti. washable in temperatures to 40 Centigrade with dimensional stability 8428
swelling treated silk. surface and fracture morphology 27
tanned silk. black dyeing using metallic salts as mordants 8494
thermal and photochemical degradation of silk. naturally degraded silk samples compared with laboratory degraded samples 7275
unevenness in filament linear density of silk. formula for production use 4917
United States and People's Republic of China. agreement on silk blends and other vegetable fiber textile products imported 2358
United States export licensing system amended. visas now used for silk blends from China 771
viscoelastic properties of silk fibers irradiated with ultraviolet rays 1622
washable. IFI test found insignificant bleeding. color damaged during drycleaning 2078
water-ethanol separation by pervaporation through silk fibroin membranes 7083
water-soluble polymer sizing. effects on raw silk 984
weighted silks studied with energy dispersive x-ray spectrometry. comparison with untreated and museum silks 4823
weighted. reduction in fiber strength and abrasion resistance with process. tears when cleaning often unavoidable 4136
wet processing of silk and blends. machinery, dyeing, finishing 6843
wool and silk fabrics. color changes from alkalies 7636

SIMULATION

adding dye at intervals in cycle. dye absorption model 8505
aging, accelerated in metal matrix composites 8356
artificial intelligence and the textile industry. expert systems 8811
awnings and canopies. computer aided engineering and testing 8661
baghouses. fabric filtration, mathematical model 7520
batch polymer dissolution processes. calculation algorithm 7324
breakage in warps predicted by mathematical modeling 3826
byssinosis. in vitro model of constrictor effect on pulmonary muscle 8861
carbon fiber adsorbents. cleanup of gas discharges from acetone vapor 8846
carbon/epoxy composites. testing for strength and lifetime 7821
carding. effect on wool yarn processing 5731
chromatic color appearance using fluorescent light 8724
computer programs for simulating production conditions and aid in problem solving 6352
cotton cleaning operations, determination of quantitative efficiency factor 7155
cotton dust, computer simulation 7176
cotton fly dust separation improved 8906
data processing role in computer integrated manufacturing 7150
delaminated sublaminate. buckling model 2684
diaper microclimate. simulation 3037
Dow Corning's technical center in Greensboro, North Carolina, for textile chemical manufacturers 7215
dyeing yarn packages. vacuum method 5217
dyeing, continuous thermal fixation, particulate dye migration, causes and cures 5254
earthquake loading stresses. analysis of geotextile reinforcement equilibrium 7838
elastic response of composite reinforced by coated fiber oriented in various directions 6302
elastic stress/strain behavior modeling for geotextile reinforced soil systems 7840
Enterobacter in cotton dust. respiratory inhalation study with cellulosic dust 8853
epoxy-amine-glass composite part. filament winding simulation 4346
fabric deformation using CAD system 7074
fabric uniformity using scanner control. imitation model using, scanner control for fabric uniformity, design, abilities 5518
fiber cement corrugated sheeting. load predicted with finite element analysis 3514
fiber composites. tensor transformations and failure criteria 8355
filament winding process. kinetic, heat transfer models 8353
filament winding to reinforce cores results in reduced time and materials consumption 3408
filament wound composite cylinders. electrothermal curing 5958
filament wound cylinders. manufacturing stresses and strains 4321
filling process of capillary-porous structure of fibrous materials 5307
formula for warp knit fabric development from filament yarns 6691
friction spinning. mechanics. torque simulator 140
friction spinning. perforated drum influence on yarn surface twist 8177
geogrid reinforcement between granular layer and clay substrate in test model evaluation 7832
geotextile layer linked to gravel bed in railway subgrades via computer model 7778
geotextile reinforcement and soil subgrade, synergistic behavior predicted with computer model 7834
geotextile reinforcement calculated from earth slab derived from inner and outer stability 7771
geotextile reinforcements. calculation of minimum transmissivity with finite element calculation 7836
geotextile. synthetic drain envelope effectiveness. evaluation model 6782
geotextile/soil systems analyzed for elastoplastic element 7851
geotextiles. mathematical model for determining minimum requirements for desired roadbed characteristics 7842
gin process control system. dynamic simulation model designed to optimize profits, minimize processing and energy consumption 6444
glass fiber reinforced polymers. controlling materials and molding conditions to produce smooth surfaces 8333
hygrothermomechanical fiber composite fatigue. simulation 4328
IIC's Startish software for cotton knit fabric development 8801
ink mixing behavior. modeling with polynomials 2235
jute. irregularity in drawing slivers 5726
kenaf. waste removal with air jet during sorting and pressing 4914
Kevlar/epoxy composites. compressive response 6298
light scattering. mathematical modeling 2206
limit equilibrium calculation for geotextile-reinforced embankments. comparison of displacement and finite element methods 7852
load redistribution models for geotextiles reinforcing raft foundation and pipe under embankment 7853
mathematical models for graphite fiber reinforced aluminum composites 3515
mathematical models forecast dye behavior in the environment 3142
mechanical behavior of sandy soil reinforced with a geotextile membrane 7854
modeling geomembranes with encapsulated clays for water filtration 7930
modeling tension changes in warp yarn motion during warp knitting 8301
open end friction spun yarns. analysis of twist 4945
pattern recognition of fabric on digitized surface. Hough transformations 7829

polypropylene fibers reinforced with glass. fiber breakage during extrusion 5699
prepreg tape conformance during automatic tape layup 4337
processing new hemp and jute fibers 4820
production costs, computer simulation. three cylinder mill 4728
rainwear. waterproof and vapor permeability of fabrics on the market 7721
roller abrasion, deformation, rigidity, strength, torsion, and tension 4711
roofing membranes, nonwoven polyester. strain energy failure models 6040
SCARP apparel display computer software from Japan 8803
semi-worsted processing of wool. computer model 1687
sewing machinery, zig zag. five centered cam operated device for needles 4557
spectral radiance, contribution of fluorescent colorants measured. Kubelka-Munk model 8740
spinning mill production costs through computer simulation 3917
stiffness loss in composite laminates due to curved matrix cracks 6311
strength of multidirectional unnotched and notched composite laminates 6312
structural factors affect absorbent characteristics of nonwovens, model 6066
symmetrically laminated 36 DOF composite triangular plate. shear deformation 6313
synthetic yarn deformation process. statistical modeling 3822
Teijin. program for simulating perspiration 7345
tensile deformation model for polymers 8676
testing flocked/nonwovens' strength, influences in model 5120
thermal insulation of apparel fabric, mathematical model 5124
total fiber consumption and domestic mill demand. influencing factors 6456
twist tenacity of multifilament yarns. effect of melding 5817
twisting. effects on other processing factors. computerized determination 4947
United Kingdom textile cycle. model 2296
water jet cutting of non-metallic fabrics 4534
water vapor transmission through fabric 8732
weft movement model for air jet loom. differential equation 8268
woolen carding machinery. evening ability 7368
world cotton market transition. effects on United States industry analyzed with econometric model 7223

SINGEING

Babcock 3.4-millimeter continuous preparation range at Lonrho Textiles, singeing, desizing, scouring, bleaching 6844
biogas from willow dust. plant studies 3929
Cosmos IV singeing machine from Hill-Lupton. twin flame system 5186
finishing machinery at Klopman's plants in Frosinone 5538
ITMA [1987] highlights in wet processing. advanced technology, developments 4393
ITMA [1987]. innovations in wet processing machinery. application of process control 6821
knit fabrics. singeing with Pyrotrop singeing machine improves quality 4418
Parex carpet burners. removing surface fibers from tufted carpet backing 7573
Parex Carpet Singeing Burners from Ernest Turner for tufted carpet backings 8466
Parex Series Mark VII singeing machine from Ernest Turner. features, capabilities 2731
Vollenweider AG Textilmaschinenfabrik's Pyrotrop singeing machine for knit fabrics. pilling resistance 2732
warp sizing. Auburn undergraduate research projects 1739

SISAL (SEE ALSO OTHER HEADINGS, SUCH AS LEAF FIBERS)

graft copolymerization of acrylonitrile onto sisal fibers 7984

SIZING (SEE ALSO OTHER HEADINGS, SUCH AS COATING, DESIZING, WARP PREPARATION)

agents and technologies used around the world. international business in sizing 2554
air jet spun and textured polyester and viscose adhesive yarn preparation for breakage reduction during knitting 985
alternatives to sizing. application of ethylene oxide lubricants on sectional warping machine 4995
appraisal of sized yarn behavior in fabrics with Reutlingen Webtester 4681
Auburn undergraduate research projects. singeing. abrasion resistance in warp sizing 1739
Auburn University Textile Slashing Short Course. [1987] proceedings 1740
Barber-Colman. slasher catalog 5840
cold sizing of linen. new product based on Y-tack 60L. properties and use 7404
computer control. production and quality monitoring 2555
computer control. WR-M and WR-C from Sucker and Mueller 6626
conference. techniques. costs 4160
controlling warp sizing degree, liquor uptake. devices from Pleva, Sucker and Mueller 4162
cotton fabric preparation. faults in finishing 8235
cotton warp, simultaneous sizing and pigment dyeing process, tests 4996
cotton warps and polyester/cotton yarns. acrylics replacing carboxymethyl cellulose and polyvinyl alcohol 8239
cotton yarn resistance along the back rest, lam, and heddles on the ATPR rapier loom 5029
developments in synthetic sizes and evaluation with weaving yarn 4163
draw-sizing compared with warp-drawing. quality and costs 8237
draw-sizing undrawn or partially drawn nylon and polyester yarns 8140
drying section, new method reduces tension, eliminates stretching of yarn 4997
elimination of sizing. alternative preparations to reduce friction in spinning 3341
formulation, application, improved yarn quality, for fabrics on air jet looms 2556
heating methods for drying yarn. conduction, convection, radiation, dielectric 2557
high pressure. investigation 6640
improved speed, air pressure, and size content resulted in better size coverage, tests 4998
In-Process Quality Control Program in slashing operations 2552
kinetics of drying influences the speed of sizing and amount of steam released into sizer zones 183
laboratory testing of yarns. sampling, limits of testing, quality 2558
linen. marginal resistance to solvents results in limp fabric after several drycleanings 573
McCoy-Ellison Incorporated's 3100 sizing system for spun yarns 3415
pneumatically controlled pressure assures uniform size application 6630
polyester filament yarn prior to weaving 7405
quality control considerations. factors to monitor 2559
radio frequency drying of sized yarns. study results 2560
radio frequency drying of yarn in the sizing process 1982
radio frequency drying polyester/cotton warp yarn in sizing process 5837
ramie fabrics. problems with manufacturing 370
size analysis. correlation between individual laboratories using the AATCC Method as a basis 3812
slashing components. troubleshooting guidelines 1742
slashing, weaving cotton yarn, humidity and temperature parameters influenced by the size and drying process 4994
slashing. process control. process modeling methods 1743
slashing. quality control practices for better warp production 1741
solid size application to yarns for weaving. research at Georgia Tech University 2561
starch processing by enzymes 185
textile rental industry 2079

Textile Slashing Short Course Proceedings. [1986], from Auburn University 2553
vacuum extraction of sizing material for reuse by vacuum extraction 2568
viscosity variation of starch and APV blendings. new mathematical model 1744
VS 2 size preparation installation and Sucker-Mueller 5843
warp preparation for a shuttleless loom. minimizing break on front of slasher 2562
warp sheets sized with foams 3414
warp sizing. near infrared reflectance analysis to determine size add-on 1751
warp sizing. technology, sizing paste chemical properties 1750
warp yarn preparation. yarn properties affected by slashing. optimization of slashing process 2563
warp yarn sizing replaced with simple yarn lubrication step 7371
warps' weaving performance correlation through testing with A-C Eurotech abrader 3820
wool yarns. nonaqueous sizing method using powdered polymer 2564
yarn hairiness reduction on the slasher. separated end drying 2565

SIZING AGENTS (SEE ALSO OTHER HEADINGS, SUCH AS GLASS FIBERS, STARCH)
acrylics as replacements for carboxymethyl cellulose and polyvinyl alcohol 8239
agents and technologies used around the world. international business in sizing 2554
air jet spun and textured polyester and viscose adhesive yarn preparation for breakage reduction during knitting 985
alternatives to sizing. application of ethylene oxide lubricants on sectional warping machine 4995
caustic soda recycling in dyeing, finishing (Conf. Paper) 8851
closed loop recycling system using ultrafiltration to separate polymer sizing and purity effluent 8445
composition based on adhesive properties, tests on polyester and cotton woven fabrics 986
cotton yarns sized with lignosulfonate for preparation on air jet looms 184
developments in synthetic sizes and evaluation with weaving yarn 4163
developments, improved Soviet products 5166
discoloration of fabrics caused by solubility of sizing or finish 2729
elimination of sizing. alternative preparations to reduce friction in spinning 3341
foamability, viscosity study of commercial sizes 8240
formulations and materials. review of fundamentals 2567
improved speed, air pressure, and size content resulted in better size coverage, tests 4998
KF versus Bevaloid-400 for acetate warp, tests on both sizes 4164
lignosulfonate size saves energy 4999
polymeric on cotton yarns. photoacoustic spectroscopy study 2533
polyvinyl alcohol, improved solubility with surface active agent added during size preparation 1465
polyvinyl alcohol, modified 1915
polyvinyl alcohol. copolymers for different versions of original uses 4165
powder grade acrylic sizes for staple yarns 1746
PVA. manufacture, types, applications, desizing and reuse 1745
regeneration from cotton gray fabrics 1916
removing size materials from pre-washed denim 1747
rheology of sizing baths. potato starch derivatives used in blends 1748
shirts treated with polyvinyl acetate sizing. care precautions 7006
size viscosity. effect on slashing 1749
starch. structure, short range, long range, aggregating. amylase and amylopecine compared 768
starches, potato and corn, extraction procedures used on cotton yarns 694
substitution of wheat for corn starch 7088
vacuum extraction of sizing material for reuse by vacuum extraction 2568
VM size for polyester filament 2566
warp sheets sized with foams 3414
warp sizing. technology, sizing paste chemical properties 1750
warps' weaving performance correlation through testing with A-C Eurotech abrader 3820
water-soluble polymer sizing. effects on raw silk 984
wheat and corn starches and polyvinyl acetate sizing used in textile rental industry 2079

SIZING MACHINERY
Barber-Colman. slasher catalog 5840
Barmag/Tsudakoma draw sizing line, specifications 935
conference. techniques, costs 4160
cooking unit linked to sizer by computer. Procomat from Zell 4167
digital control for sizer drying area. temperature, speed, moisture in warp 5000
draw-warp-sizing process. Mayer-Sucker + Mueller unit 5835
Industrial Precision Ltd.'s Swet Rod applicator for warp beam lubrication 3410
ITMA [1987] exhibit highlights. weaving and preparation equipment 195
ITMA [1987] highlights in wet processing. advanced technology, developments 4393
ITMA [1987]. innovations in wet processing machinery. application of process control 6821
ITMA [1987]. sizing developments 1735
ITMA [1987]. various manufacturers 5841
ITMA [1987]. warping, sizing, and warp preparatory processing machinery 6628
ITMA [1987]. weaving preparation. machinery. electronic control 6636
ITMA [1987]. weaving preparation 5856
Karl Mayer. draw-warping and sizing system 5836
KBU system. microprocessor control 5162
McCoy-Ellison Incorporated's 3100 sizing system for spun yarns 3415
modeling technique applied to develop relationship between yarn speed and exit moisture on pilot slasher 987
pneumatically controlled pressure assures uniform size application 6630
Polmatex-Cenaro's EM5 natural fiber warp yarn slasher, abilities 4166
Procomat size cooking plant from Zell 5842
rollers and roller coatings for the textile industry 4752
rubber roll coverings for slashers. status and outlook 1738
VS 2 size preparation installation and Sucker-Mueller 5843
warp preparation for shuttleless loom. applicator where yarn exits in vertical direction 2562
warp-draw-sizing and warp-draw systems from Val Lesina 189
warp. Sucker + Mueller's warp sizing machine. draw-warp-sizing 6631
WDS stretch sizing line from Cora Engineering 5844
West Point Foundry and Machine Company's Model 863 Equi-Squeeze size box 3416
yarn hairiness reduction on the slasher. separated end drying 2565

SLASHING, SEE SIZING.

SLASHING MACHINERY, SEE SIZING MACHINERY.

SLIT FILMS, SEE SPLIT FIBERS/SLIT FILMS.

SLIVER (SEE ALSO OTHER HEADINGS, SUCH AS CARDING, COILING MACHINERY, DRAWING, DRAWING MACHINERY, UNIFORMITY, YARNS)
control of mean linear density during carding improves spinning 7365
control of sliver count using material fed into carding machine to produce a signal 931
cotton fibers. moisture content in laps and sliver, computerized method 123
dead end chute feeding, more uniform cotton sliver, parameters

4082
drafting in gill box. measurement of drafting force 8159
flat carder, Falubaz CZ-693, produces no-web sliver. evaluation of performance 121
GC-13 drafter, PB-29 LF comber, worsted system, sliver quality 126
gill box, GV 10. Schlumberger 8145
jute slivers. irregularity in drawing 5726
jute. drafting tenacity 5615
KSL (S. M. Kirov Institute) device for fiber orientation, straightening tests 4087
material flow. bobbin conveyor, transfer robot, and pin carriage from Saurer-Allma 5796
optical sensor method, fiber orientation 4096
PES and viscose sliver production. high quality spinning on air jet machine 4922
processing, monitoring with Uster Sliverdata 3338
quality. ChMD high speed carder. cotton yarn effect on drafting and spinning 117
quality. controlling U% by locating card defects 3332
RSK-Sh worsted system carder, abilities, sliver properties 4080
Saurer-Allma's ESP spin twister for novelty yarns. utilizes sliver spun and filament yarn 3363
sliver thickness monitoring by ultrasonic method 4661
Spiniab Sliver Monitor 700 System. sliver evenness monitor 938
staple fiber bundles in tension. tangent compliance 3
stretch break converting. polyacrylic fiber and worsted yarns 1689
uniformity optimized through carding machine modifications 3329
Unirea 4S carder, high speed, adjusted for improved sliver 4907
vigoreux printing process for wool sliver at CSIRO 4472

SLIVER TO YARN SPINNING, SPINNING MACHINERY)
drafting in gill box. measurement of drafting force 8159
jute. drafting tenacity 5615
PES and viscose sliver production. high quality spinning on air jet machine 4922
rotor spinning. problems and possible solutions in sliver preparation 6589

SOAP, SEE DETERGENTS.

SOFTENING AGENTS
bacteria and extracellular catabolic enzyme activity. softening of hard root cuttings of jute 828
Dilasoft KLP Liquid concentrate. softener from Sandoz for cellulosic and manmade fibers and their blends 5158
direct, azoic dyed materials affected by DMDHEU resin, softeners, silicone emulsions, flame retardant, other finishing agents 1251
fabric softener developed by Sandoz Chemicals to cut down on sewing damage to knit fabrics. offered at SEAMS show 4553
fabric softening formulation modified for lower viscosity 1977
Hydrosoft N3B from Hydrolabs 5159
polyacrylonitrile fabrics. effect on concentration on whiteness and fluorescence 1846
PVC-plastisols. viscosity behavior on softening pastes 8558
silicone microemulsion-based softeners from Dow Corning 8552
terry towels. affect on absorbency, whiteness, and hand 581

SOIL RELEASE FINISHING (SEE ALSO OTHER HEADINGS, SUCH AS DURABLE PRESS, RESIN FINISHING)
Baygard SF and SF-A from Bayer. carpets 6150
Enka Polyamide 1000 SR carpet yarn with Scotchgard Stain Release 7390
mechanism of synthetic textile soiling. soil release and soil repellent finishes 2080
reactive carboxymethyl cellulose finishes for cotton fabrics 8553
Release Point determinations. effect of fabric and yarn geometry on soil release 670
release point technology used to measure soil release from fabrics treated with soil release agents 4591
removal of soil. mechanisms. soil deposition and redeposition 7009
review of soil deposition, redeposition, and release 583
Stainmaster carpet from Du Pont. fluorochemical technology. soil release, stain resistance 1420
studies of stain removal characteristics of different fabrics, various stain resistant finishes and their efficacy 3749

SOIL REPELLENT FINISHING (SEE ALSO OTHER HEADINGS, SUCH AS OIL AND WATER REPELLENT FINISHES)
Alguard RD stain repellent finish for nylon carpet fiber 7649
carpets. Amoco PermaColor stain and fade warranty 7030
dyed nonwovens, soil repellent finishing, special tests on color changes 6025
finishes, Baygard SF and SF-A from Bayer 6150
methods of soil repellent/release finishing for polyester blend fabrics 2080
plasma etching. color measurement soil evaluation 6945
removal of soil. mechanisms. soil deposition and redeposition 7009
review of soil deposition, redeposition, and release 583
spray-on solvent for synthetic carpets and other textiles 8541

SOILING (SEE ALSO OTHER HEADINGS, SUCH AS DETERGENCY, LAUNDERING, STAINS)
cleaning stain resistant carpets, Certified Technicians and points to follow 5441
computerized soil counting system at Shasta Linen Supply. annual cost savings 4584
custom of rental mats at Georgia State University. Aratex Services and Kleen-Tex to control dirt and enhance client's image 4640
electron microscopic studies of soiling and soil removal. identity and distribution, residual soils 582
electron microscopy analysis of soiling and soil removal 4593
floor coverings, carpets and appropriate cleaning methods 3732
mechanism of synthetic textile soiling. soil release and soil repellent finishes 2080
mechanisms. deposition. removal. redeposition and anti-redeposition 7009
photoelectric testing of color change in nonwovens 5123
release point technology used to measure soil release from fabrics treated with soil release agents 4591
removal of oily stains. alcoholic potassium hydroxide solution 3739
review of soil deposition, redeposition, and release 583
soil and factors affecting soil removal 2061
stain and soil resistance for carpet protection. 3M executives describe company's products 7035
stain removal. several methods 2869
Tkanol washing agent with surfactants for oil spot removal 5308
Trevira polyester, stain resistance leads to increased carpet sales. promotions 6252
tristimulus integration. weighted-ordinate method 3847
uniform fabrics. soiling and soil removal tests 6758
water soluble soil, difficult to remove. effect of moisture on drycleaning system 7004

SOLUTION DYEING, SEE DYEING PROCESSES.

SOLVENT PROCESSING, SEE DYEING, FINISHING, SCOURING, ETC.

SORPTION (SEE ALSO OTHER HEADINGS, SUCH AS MOISTURE PHENOMENA AND SPECIFIC FIBERS, PROCESSES, ETC.)
absorbency. single fiber wetting measurements 4651
absorbent characteristics of nonwovens. fluids 6076
acetone vapor sorption by carbon fiber sorbents 7303
acid dyes by cationic polystyrene latex 6870
acrylic fibers. sorption of cationic dyes. Donnan approach 8481
acrylonitrile and 5-vinyl-2-methyl pyridine. modified chemisorptive fibers 8042
bis(dithiobenzyl) nickel compounds. effect of substituent groups 7926
carbon fiber adsorbents. cleanup of gas discharges from acetone vapor 8846
carboxylic acids by wool. solvents 3233
cellulose fiber pulp. crosslinking improves sorption and fluid

retention 8044
cellulosic absorbents. fluid migration measured by computed tomography 4686
cellulosic fabrics. examination by NMR spectroscopy 8377
cigarette filters. modified acetate tape increases selective sorptive power 8009
circular knit fabrics, spun and filament yarns. properties of integrated knits 2649
composite fiber adsorbent for uranium adsorption from seawater 8365
composite materials, adsorption of polymers at interface 6744
concentration profiles of permeant during pervaporation in membranes 8392
crosslinked DMDHEU and cotton. pore structure and solute accessibility 4485
crosslinked polyethylene glycol bonded to fabric. absorbency and wear 4299
dye into cotton fibers, affected by crosslinking 3605
elongated silk fibers. dyeing with acid dyes 8493
equilibrium. interactions with acrylic fibers. cationic dyes 418
extended wool fiber. initial rate of dyeing and fiber surface wettability 2753
fibers. absorbent. nonabsorbent. superabsorbent 2487
fluid spreading in web structures 4675
fluid transport performance in low density absorbent structures 4676
Ftorlon filled fluoroplastic fibers. surface active agent effects on sorptive properties 8062
hydrogen chloride and ammonia sorption by carboxyl-group containing fiber 7913
Johnson and Johnson develops laminate wound dressing. high absorbency and low adherence 5993
knit fabrics. regenerated viscose contribution 3256
metal cation sorption rate by wool fiber 6480
nonwovens, rewettability of thermally bonded. polyester staple 5999
pads containing superabsorbent polymer. study of fluid movement 6072
PAN fibers. dependence on composition 864
polyamide yarn. sorption of nonionic surface active substances 3392
polyazo dyes. annelation effects on absorption spectra 8520
resistance of fibrous material to forced passage of liquid 4679
Siblon viscose fiber. water vapor sorption 4839
structural factors affect absorbent characteristics of nonwovens, model 6066
substituted 8-(arylazo)-7-hydroxy-4-methylcoumarins. spectrophotometric studies 4467
surgical dressing from Kendall. improved sorption and liquid transfer 8419
testing performance characteristics absorbent products. diapers and pads 4691
thermally bonded cellulose pads 4625
TRI Liquid Breakthrough Tester CS-244. Custom Scientific. penetration of liquid through fabric system 3059
vacuum compaction before low temperature dyeing, increased sorption 5227
Vion AN-1 chemisorptive fiber. operational properties 3247
viscose fiber dyeing. adsorption of Congo Red 4442
viscose rayon and nylon 6. heat of moisture sorption. measurement by heat transfer calorimeter 1446
viscose yarns upon drying 4918

SPANDEX CORE YARNS, SEE CORE YARNS.

SPANDEX FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS ANIDEX FIBERS, ELASTIC YARNS)
commercial production methods 3309
Du Pont expands Lycra production capacity 6615
Du Pont's impact on hosiery industry from development of nylon in 1930's to present with Lycra 2670
Du Pont's Lycra, apparel, knitting, core yarns for weaving, products from Poland 4887
Lycra and cotton. swimwear from. Citrus, an Apparel Ventures line 2947
Lycra, elastane fibers. history. development. markets. Du Pont's role 8045
Lycra. blend of cotton and spandex basis for Oscar de la Renta's Expressions sportswear line 2935
Lycra. growing popularity in hosiery market. silken sheers 1121
manufacture, properties, and products 8128
manufacturing by solution dry spinning. properties. uses 2488
polyurethane developments. Perlons. cellulose derivatives 7352
polyurethane developments. properties 1684
polyurethane. fiber uses 3310
polyurethane. influence of hard segments on modulus, tensile recovery 8131
production, structure, properties, and end uses 4043
pure, wrapped, or corespun in fabrics 8046
review of polymerization and extrusion methods. effect on fiber properties (Abstract) 8075

SPECIFICATIONS AND STANDARDS (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL, FLAMMABILITY, HOME FURNISHINGS, INFORMATION, LEGISLATION, WASTE TREATMENT--EFFLUENT, WATER)
Aristoc, hosiery firm, achieves British Standard for quality control. uses registration to aid management and promote product 7121
ASTM and industry standards. Minimum Average Roll Value for geotextiles 8398
ASTM and NFPA. protective clothing 8642
ASTM development. bulk testing of textured yarn 8972
ASTM wide width strip evaluation for geotextile tensile strength 7841
ASTM [1987] for yarns, fabrics, general test methods 3040
ASTM [1988]. yarns and fabrics 8931
ASTM. chemical protective clothing 7732
ASTM. performance standards for textile fabrics 7255
Australia. classing wool clip. core testing and clip preparation 848
Australia. commercial wool testing laboratories. yield and micron testing 853
Australia. greasy wool. methods, technology, research 855
Australia. Objective Clip Preparation of wool 846
Australia. objective measurement wool. impact on industry 856
Australia. wool. sale by description and sample. [1973] status 857
Australian Objective Measurement Project. impact on clip preparation, testing, handling, and marketing 844
Australian Objective Measurement Project. presale core sampling and sale-by-sample 843
Australian Standards Association examines body dimensions. standardized sizing methods 3680
Australian Wool Corporation. wool. sale by description 860
Australian wool, sale by description. raw wool properties 859
Australian wool 841
automotive fabrics. xenon arc weather test calibration standards 7045
awning code changes pose monumental task 6262
awnings and canopies. computer aided engineering and testing 8661
brassieres, sizes, documentation system for production to conform to standards 5362
British and international standards. flame and fire protection 1544
British Interlinings Manufacturers Association. Code of Practice 6976
British standard test method and body-mattress interface pressures. air mattresses 8741
BTRA performance standards on spinning and weaving 7978
carbon fiber manufacture and quality control. Toray 8822
carding machines from eight manufacturers. specifications 8149
carpets, stain resistant. cleaning standards from Association of Specialists in Cleaning and Restoration 6251
chemical exposure. Permissible Exposure Limit Project in United States 6335
CIE. [1931] and [1964] systems. significance to today's

colorimetrists 1917
classing wool clip in Australia 851
coated fabrics. British BS 3424 standard 269
coated fabrics. Federal Test Methods Standard No. 191A. listing 688
color difference measurement for automotive materials 3848
communication standards for computerized equipment from the Textile and Apparel Machinery Modernization Foundation 6361
composite fabrics for protective clothing 8644
composites 7060
computer integrated manufacturing standards called for at Textile and Apparel Machinery Modernization Foundation 6358
correlation of pilling test methods to develop international standard 7085
cotton classing. HVI system spreads slowly in United States industry 5611
Cotton Marketing Advisory Committee. recommended cotton marketing methods 7995
crimp standards. hot air method and hot water method comparison 4663
environmental audits 752
Environmental Protection Agency. revised national ambient air quality standards. effects on ginning 7193
Eurocolor patterns. measurement of accuracy 3582
FAA regulations. fire resistant cargo liners for commercial aircraft 4347
Fabric and Suppliers Linkage Council's adoption of voluntary standards 1554
fabrics. standardized performance specifications determined by fabric manufacturer prior to sale 797
FASLINC standards for product requirements between textile manufacturers and suppliers. workshops on Electronic Data Interchange 6395
FASLINC standards for textile manufacturers, newly elected board members 6394
fire resistant Kevlar composite interior panels for commercial aircraft 4322
flammability testing standards. need to upgrade to make test results more relevant 8719
floor coverings. British Standards revised 637
German federal materials testing authority standards modified 3809
German manufacturers, institutes, and trade groups work to promote use and establish standards. geotextiles
German. floor coverings and minimum fire resistance standards 2177
Germany textile industry. glossary for finishing machinery 7935
Germany's new sizing system from the HAKA institute 2031
greasy wool. large scale testing to compete with synthetics 854
HercuFlex impregnated fiber glass yarns reinforcing coated fabrics. PPG Industries 8207
Hungarian apparel industry. comparison to ISO and Comecon 7979
incontinence products. standards. correlating technical tests with user trial data 6765
industrialized nations. varying standards for burn testing 3994
inventory cost standards for spinning mills 8819
ISO. history, function, current projects 2396
IWS. washability tests 7086
James H. Heal & Company's Rhoburn tester to meet new flammability standards 3831
knitwear 8641
Kynol novoloid fiber. flame resistant. non-melting. non-toxic 8091
Lilion nylon 6 and nylon 66 monofilaments, Wistel polyester from Snia 8092
manmade fiber industry. practice reveals many deviations from ideal testing and specification standards 4032
Microscan from Beacon Controls. computer system designed to operate in hazardous areas 4713
mohair. quality standards developed by International Mohair Association 6471
New York State code. product liability. building code compliance 7251
personal flotation devices. standards 4623
pilling standards for wool and wool blend women's apparel fabrics 4359
polyacrylonitrile fiber, standards and quality of Anilan produced in Poland 43
polyesters. properties and end uses 8114
polyoxamide fiber. Vivrelle from Snia Fibre 8086
quality control. testing methods and standards in industry adapted to technical advances in science 4647
raw wool characteristics to be tested before sale. CSIRO objective measurement 4018
raw wool. measurements and processing performance 7806
roll length, width, seam breaking strength and integrity, shedding, tear 3057
SAFLINC passes EDI voluntary standard. more apparel industry participation needed 6407
silk fabrics. crepe, georgette, chiffon. technical parameters and specifications 5128
sizing agents from corn and potato starches, extraction procedures used on cotton yarns 694
Soviet classification system for woven fabrics, based on nomenclature of indicators 5153
Soviet cotton waste standards, released [January 1987] 4012
Soviet Union. underwear, pants. knit. men and boys. standards for sizes and measurements 616
TALC. assimilation of voluntary standards by textile industry 2397
TALC. Electronic Data Interchange and Quick Response 795
TALC. moving fast to standardize the industry 3993
TALC. standards adopted. distribution and transportation, voluntary shipping label, packing guides 1591
TALC. voluntary standard for flagging fabric defects 5478
terminology for manmade fibers, sixteenth installment 66
terminology standardized for Polish chemical fiber industry 4856
toxic dyes classified by criteria of EEC Directive 79/831. name and number 7194
tristimulus values. calculation recommended by International Commission on Illumination 3852
Uniform Code Council. Universal Product Codes 2844
United Kingdom. Carpet Grading Scheme 3006
United Kingdom. garment labeling 2035
United Kingdom. seat belt requirements 6048
United States Army material specification. carbon fiber bismaleimide woven fabric prepregs 4315
upholstery and end use requirements. British Standard 2543, solvent and wet cleaning, flammability 6261
Voluntary Inter-Industry Communications Standards. Universal Product Code and Electronic Data Interchange 796
West German civil service, uniform and protective apparel standards testing 3838
wool classing and preparation. Australian standards 850
wool. classing fleeces for fineness 852
WRONZ card-gill-Almeter technique for measuring fiber length of scoured wool 8006
yarn bulk measurement in Poland, Volumetr IW method 175

SPECTRA IS A HIGH MODULUS (POLYPROPYLENE) FIBER.

SPECTRUM ANALYSIS (SEE ALSO OTHER HEADINGS, SUCH AS COLOR MATCHING, COLOR MEASUREMENT, FABRIC TESTING, FIBER TESTING, ELECTRON MICROSCOPY, DYES AND DYEING ASSISTANTS, IDENTIFICATION, RADIOACTIVE TRACERS, TEXTILE NUCLEONICS, X-RAY)
acid dye interaction with non-ionic surfactants. spectrophotometric studies 4462
Applied Color Systems Spectro Sensor II, Chroma-Calc program for color matching 404
calculation of Kubelka-Munk absorption and scattering coefficients. approach based on linear least squares technique 1197
carbon fibers. oxidative pretreatment effects on fiber surfaces studied with Thermal Desorption Mass Spectrometry 7921
carbon fibers. surface composition studied by X-ray photoelectron spectroscopy 874

cellophane. thermo-oxidative degradation studied via ultraviolet and infrared analysis 7294
ceramic/polymer composites. Nextal fibers studied via Fourier transform infrared spectroscopy 7492
chromatic color appearance using fluorescent light 8724
chromotropic acid and 8-hydroxyquinoline azo derivatives. infrared spectral studies 1943
color appearance and brightness of chromatic object colors 8727
colorimeters. factors to consider when purchasing 4423
composites, carbon and silicon carbide, testing 1462
cotton bract extracts. analysis for bronchoconstriction agents 8859
cotton textiles. durable press reactants based on cyclic ureas. solid probe mass spectrometric analyses 7640
determination techniques for modern manmade fibers 7060
dicyanovinyl-substituted dimethoxybenzenes. absorption spectra 6909
durable press agents, formaldehyde derivatives of cyclic ureas 676
durable press agents. gas chromatography/mass spectrometry analysis 2793
dyed nonwovens, soil repellent finishing, special tests on color changes 6025
fluorochemical finishes. method for identification of fluoroaliphatic group 6145
formaldehyde release markers in durable press reagents determined by mass spectrometry 690
Fourier transform infrared spectroscopy used to study high performance fiber surface reactions 7338
gas chromatography/mass spectrometry 677
goniophotometry. textural measurement of carpet pile 3839
historic and prehistoric textiles studied with vibrational microspectroscopy 7795
infrared photoacoustic technique for orientation of Kevlar 49 fibers 7798
IROS-100 from Automatik. on-line quality control system for molten polymer processing using infrared analysis 8116
Kevlar 49 fibers. determination of accessibility of N-H groups 7297
Kevlar 49 fibers. diffuse reflectance Fourier infrared spectroscopy used to determine water absorption 7298
maturity, red and green differential dyeing to determine spectrophotometric analysis 3218
metameric colors. intersection of spectral curve 3844
monoazoaceto acetanilides and disazoaceto acetanilides. color properties 7631
naphthalene derivatives. proton magnetic resonance spectra 1945
Near Infrared Analysis for estimating extracts from wool treated with dichloromethane 8447
Near Infrared Analysis measures residual grease and regain. replacement for Soxhlet extraction 8745
NMR spectra of azo dyes interpreted with respect to azo-hydrazone tautomerism 441
orthotropic square plates made of fiber reinforced plastics. natural frequencies 8739
polyazo dyes. annelation effects on absorption spectra 8520
polyester/cotton. analysis with infrared spectrophotometry 3813
Raman spectroscopy. potential in wool textile research 3042
reflectance absorption infrared spectroscopy for estimating chemical changes in cotton fabric 7271
reflection coefficient in infrared light for undyed fabrics 5122
residual strain in carbon fibers/polyether ether ketone composites. Raman frequencies 6310
Rothermael Finish Analyzer. infrared spectroscopy used to measure concentration of finishes 8432
silk evaluated with scanning electron microscopy, energy dispersive X-ray spectrometry, and dye analysis 7283
spinning machinery tested for vibration and noise 7380
Stiles' 20 color matching functions and eye lens and macular optical densities 8726
substituted 8-(arylazo)-7-hydroxy-4-methylcoumarins. spectrophotometric studies 4467
techniques of spectroscopy and analysis. proceedings of symposium on analytical applications of spectroscopy 7099
ultraviolet and visible spectroscopy for assessing the nature, color, and fluorescence of textiles 7081
ultraviolet spectroscopy. cellulose xanthate reaction with chromium 7922
video digitizing system. colorimetric calibration 6288
warp sizing. near infrared reflectance analysis to determine size add-on 1751
wool. effect of heat studied with nuclear magnetic resonance 7062
woven fabric pressing evaluated with photometer 6283

SPIN DYEING, SEE DYEING PROCESSES.

SPIN FINISHES, SEE ANTISTATIC AGENTS, CHEMICAL AIDS TO PROCESSING, FINISHES.

SPINDLES (SEE ALSO OTHER HEADINGS, SUCH AS BALLOONS, CRIMPING MACHINERY)
drafting, ringframe. spindle to spindle variables and yarn quality 6569
ITMA [1987]. developments in high velocity ring spindles 3324
power consumption. formula for calculation without bobbin 8178
SC 4000 spindle setting instrument from RES Messgerate 3348
sides allocation calculations 8190
spindle's angle, kinematic analysis for tape drive, tension control, spindle bearings 4940
vibration of spindle bar on spinning and twisting frame. problems. Textile Vibrometer device 1700

SPINNERETS, SEE MANMADE FIBER EXTRUSION.

SPINNING (SEE ALSO OTHER HEADINGS, SUCH AS BALLOONS, COTTON SYSTEM PROCESSING, CREELS, DRAFTING, DRAWING, FLAX SYSTEM PROCESSING, FRICTION, RINGS AND TRAVELERS, SPINNING--OPEN END, TOW PROCESSING, TWIST, UNIFORMITY, WASTE, WOOLEN SYSTEM PROCESSING, WORSTED SYSTEM PROCESSING, YARN MANUFACTURING, YARNS)
AccuColor yarn from Du Pont. dry spun acrylic for better wickability and washfastness 862
acrylic/viscose Siro spun yarns. effects of staple length, fiber denier, and strand spacing on properties 6600
air jet versus ring spun, properties, uses 4143
air jet, PF-2R spinner. stress on core during nylon and polyester spinning 137
automation and process linking 2511
BASF Fibers Division's future plans for spinning operations 696
bast fibers, recycling into spinnable material 3207
Battelle Geneva Research Center and Spinning [2000] report 5760
bicomponent yarns with different staple length. properties of cotton/polyester yarn during spinning 3821
breaks. measures for prevention 8180
Bruno Amsler's fancy hollow spindle machine with drafting mechanism 3349
BTRA performance standards on spinning and weaving 7978
cans, S7 spinning. Gmoehling 5772
cans, spinning, model S7 from Gmoehling 5787
Cerifil from Cerit. long staple spinning system 5781
Cerifil system. technical solutions and advantages 5761
characteristics of Anilana (Polanil) polyacrylonitrile fibers, spinning recommendations 4074
CIS, computer integrated spinning. Rieter 4107
climatic influences on rotor spinning 8181
comparison of friction, rotor and ring spun fabrics for hand, tensile, tear, other properties 5125
computer integrated manufacturing and requirements for its success. applications 6329
Computer Integrated Spinning (CIS) systems 5762
cotton blend. open end and ring spun compared. influence of fiber parameters 1702
cotton fabrics from core yarns containing high tenacity manmade fibers 7391
cotton quality requirements. India 3203
cotton samples. microspinning and bulk spinning performance

3350
cotton waste. processing short staple cotton waste at Kispesti Textile Factory 4950
cotton yarn. innovations. automation and integration of processes 7372
cotton, lower grade. preparation and processing in Hungary 4897
cotton. impact of new technologies on production and marketing 6477
cotton. international statistics. spinning, weaving, and raw material consumption data [1985] from textile producing countries 2417
cotton. spinning technologies compared 5773
cotton/nylon 6, high speed. pre-yarn processing, spinning, yarn properties 4927
cotton/polyester blend yarn with improved tensile properties 8173
development in open end rotor spinning and fine yarn quality compared to conventional spinning 4928
electrostatic melt spinning process. high voltage field on molten thermoplastic 946
electrostatic spinning apparatus.Ethicon patents. manufacturing vascular grafts 6243
electrostatic spinning system for multiple tubular structures 5744
electrostatic. twisting mechanism and twisting efficiency 138
Enterprise Machine and Development Corporation, United States producer of air jet texturing machines 6603
Epic sewing thread by the MEZ company. factory-based cotton and polyester yarn spinning facilities 3322
FA/S spark eliminator from Jossi built into the flock conveyor line for spinning plants 3345
Fiber Processing Center operated by Cotton Incorporated 2202
filter panel, APF automatic. from Luwa 4737
fixed carding segments. influence on spinning and process 5730
flax. dry spinning machinery. innovations shown at ITMA [1987] exhibit 7373
friction spinning. fine yarn. performance factors 139
friction spinning. mechanics. torque simulator 140
friction spinning. possibilities for the future in relation to other methods 3351
friction. yarn tensions 4109
future prospects. short staple fibers. ring and rotor 4929
greasy wool. effect of staple strength and position of weakness on worsted spinning 159
hairiness of open end and ring spun yarns. effects of hank of sliver, twist multiplier, and chemical treatments 3398
hairiness, causes of and reduction 4135
hairiness, yarn. causes and reduction 6599
hand spinning commercial flax via worsted spinning and the long draw 7374
Herdmans linen spinning plant with latest computerized equipment 4923
hollow spindle method 2518
HSS systems by Val Lesina. gaining notice in Italy and abroad 5763
India. current data and prospects through the year [2001] 4925
India. ring spinning, progress to date, future plans and modernization 945
inventory cost standards for spinning mills 8819
Ireland. future prospects. optimistic outlook. potential problems 7858
ITMA [1987]. CAD-CIM in spinning, developments 5751
ITMA [1987]. conventional techniques. focus 5753
ITMA [1987]. cotton spinning highlights 942
ITMA [1987]. descriptions of products and innovations 5765
ITMA [1987]. developments in spinning technology 8179
ITMA [1987]. monitoring. computer aided production 6581
ITMA [1987]. papers given at second MITEST 6620
ITMA [1987]. short and long fiber. trends, innovations 5757
ITMA [1987]. spinning mills in the year [2000]. trends 5774
ITMA [1987]. technological developments in yarn preparation machinery for cotton and wool spinners 2506
ITMA [1987]. trends in long staple spinning machinery 5764
Jointair 905 splicer on Savio RAS-15 spinners, effectiveness 136
low twist spinning of cotton yarns using wet roving 947
machinery, data sampling. techniques and hardware 4718
melt spinning chambers. design trends. air blow devices. feed mechanisms 1663
monitoring system Corolab for Autocoro rotor spinning 5775
Nisshinbo California, spinning and weaving plant in Fresno, California 6344
Nisshinbo Industries spinning mill, operations and reasons for high efficiency 2517
noise level reduction during cotton ring spinning. test results, methods 948
novelty yarns. production techniques from filament yarns 5800
pineapple leaf fiber/acrylic blend on jute spinning system 3352
ply spinning adapted to cotton spinning system. deficiencies of ply-spun yarns 949
polyacrylonitrile dyeability, suitability for blending 419
polyester fiber applications in Pakistan. blending, spinning 8947
polyester hollow fibers. void morphology after treatment with sodium hydroxide 5704
polyester/cotton yarn evenness improved in Chinese spinning mill 4976
preparation for long fibers. machines by HMG, Sant'Andrea, Savio-Cognetex and Schlumberger 7370
preparation. recent developments in the areas of drawing and combing. automation of spinning processes 7369
process, Cerifil, for high speed spinning of fine wools 7375
production costs, computer simulation. three cylinder mill 4728
ramie. new technology compared with conventional processes 6580
raw materials, top quality needed to ensure optimum spinning results 4930
reel, semiautomatic high speed. SITRA 6575
ring and rotor spinning. comparative study of cotton, polyester and blend yarns 3389
ring and rotor. comparative spinnability testing 4931
ring and rotor. effect of fiber parameters on yarn hairiness 6582
ring and rotor. residual twist. study of thirty-six yarns 3353
ring frame tenters, manual labor skills improved, methods 8767
ring spinning, a practical guide from The Textile Institute 952
ring spinning, future. competition from other methods 3354
ring spinning. link systems, coners, and splicers. Mayer 4110
ring versus rotor. cost 5776
ring, friction, warp, jet, and rotor spinning methods reviewed and compared 3355
ring. ITMA [1987]. winding and twisting exhibits 4924
SC 4000 spindle setting instrument from RES Messgerate 3348
Schlumberger's Model CF 43 ring spinning machine 5767
Schweiter conveying systems. CON-CO-MAT and RING-CO-MAT 4106
short staple. forecasts for the year [2000] 5777
sides allocation calculations 8190
Siegling's Extremultus spindle belt for high speed ring spinning machines 5768
SiroSpun. short staple spinning from Zinser 5785
spinning balloon equations. wide amplitude balloon theory 151
spinning mill yarn and fiber testing methods and planning for product quality and uniformity 3828
splices, factors influencing yarn strength 6584
static and dynamic frictional behavior of DREF, air jet, and ring spun yarn 5813
Suessen parallel yarn spinning system 1701
technical yarns. Fehrer's Dref-3 friction spinning machine 5745
tension in balloon after yarn breakage during ring spinning. automated splicing machine 141
Texunion DMC, computerized 5504
transport automation, driverless. Schoeller Bregenz 4111
transport system, link, from Hamel 5749
Turkish cotton processing by Masterfil Cotton Spinning Company 823
ultrasonic device to join nylon 6 sliver, yarns during ring spinning 959
VEB Textima's improved spinning frame flyer for more constant roving qualities 3340

Velicren, acrylic fiber. properties that influence operations 1695
viscose yarns from coarser rovings 6585
wet spinning. Casto 6L process for savings in time and energy 7195
wool. High Density Spinning System from Tatham improves efficiency 4906
woolen system determined using sixteen wool fiber blends 4953
woolen yarns. preparation and spinning. various processes used today 8142
world production capabilities [1986]. ITMF Report 6412
Wrap Spun Yarns. hollow spindle technology for woven velvet. spinning, dyeing equipment 5769
yarn hairiness during. fiber migration 6614
yarn migration. mathematical model with three variables. trials and results 6586
yarn quality on different ring frames and drafting systems 142
yarn tension and monitoring spinning machinery 1703
Zellweger Uster. devices for random sampling to measure yarn quality 4926
Zinser's Guard system for ring spinning machines. monitors spinning positions 5770

SPINNING--OPEN END
acrylic rotor spun yarns. assessing total twist from apparent yarn twist and yarn strength at theoretically null twist 970
acrylic yarn. influence of three extraction nozzles on yarn diameter and hairiness 950
acrylic/viscose rotor spun yarns tested for twist effects on flexural rigidity and elastic recovery 967
air jet spun yarn structure correlated to tensile properties 7376
air jet spun yarn structure related to tensile properties 5771
air jet. Murata's Model 802 MJS machine 5766
American cotton studied to determine criteria for designing cotton mixes for spinning 6433
BTRA performance standards on spinning and weaving 7978
causes of breakage load decrease in cotton, cotton/blend yarns relation of thickness, staple length, twist 6588
cellulose fibers with special applications in rotor spinning, standards of quality 3209
Cerifil, long staple spinning concept developed by Cerit, Pordenone. spindle, design, and spinning processes 4112
cotton and cotton system wastes. blending, roving, open end spinning, yarn uses 4097
cotton blend. open end and ring spun compared. influence of fiber parameters 1702
cotton combing wastes, rotor spinning into knitting yarns 157
cotton fiber maturity and spinning performance. thirty-six cottons studied 2410
cotton, American. rotor spinning performance study 2521
cotton, cotton system waste in open end spun yarns, seven yarn evaluations 4100
cotton, dyed. BD-200-RTsE spinner, defect prevention, IN twist intensifier 144
cotton/viscose and cotton/modal blends tested 145
cottons, United States. performance during rotor spinning 3225
Courtaulds Spinning's new Bolton open end spinning mill. plant equipment and production rate 2519
Courtelle Neochrome for spinning colored yarn on rotor spinners 5746
Courtelle open end neochrome fiber process in one combined product 5662
Czechoslovakia. developments, growth in industry 4932
development and mechanical principles. increasing importance in world yarn production 8182
development in open end rotor spinning and fine yarn quality compared to conventional spinning 4928
Dref III friction spun yarns. equivalent machine twist 4944
DREF-3 and Indian cotton. friction spinning results 6587
East European textile machinery developments 7897
fabrics composed of open end spun yarns, effects on fabric quality, properties 4360
fiber damage at higher rotor speeds 2522
fiber fineness, strength, and staple length relative to the strength of rotor spun yarn 3049
friction spinning. mechanics. torque simulator 140
friction spinning. Schlafhorst and Suessen acquire rights from Fehrer 925
friction. application of laser-Doppler anemometry to fiber velocity. German research 7362
friction. simulation of perforated drum process and influence on yarn surface twist 8177
hairiness in ring spinning measured. false loop hairiness 146
HVI testing and blending. advantages at Cone Mills 7154
intermingled. NPT R-2060 automatic needle pull tester 5462
ITMA [1987]. developments in spinning technology 8179
ITMA [1987]. spinning mills in the year [2000]. trends 5774
knitting open end yarns and spring needle wear 5526
Lenzing 1.0-dtex Modal viscose and carding, spinning behavior 3325
low linear density open end knitting yarn, production lines in East Germany, Poland and Czechoslovakia 4098
machine twist in rotor open end spun cotton yarn 7065
Mak cotton knitting yarns, production, dyeing 170
microphotometer tests of short segments for evaluation of fiber arrangement of open end spun yarns 4956
needle deterioration and relation to open end cotton yarn properties 4222
neps in rotor spun polyester yarn. classification 8693
Open End Tester 80 from Otto Stueber. yarn quality control at rotor spinning machine 961
parameters for cotton spinning on the BD-200-RTsE rotor spinner 4114
PES and viscose sliver production. high quality spinning on air jet machine 4922
PF-R rotor spinner with sensor for core control during core yarn production 143
Polish cotton industry, products, machinery, trends [since 1984] 4105
polyester yarn. finish effect on deposit generation 951
polyester, aromatic fluid crystalline. melt spinning 6553
polyester/cotton staple yarn, pre-yarn processing, dyeing, spinning, twisting 4900
polypropylene filament yarns, preoriented 6554
problems for both long and short staple rotor spinning. future solutions 6589
properties and behavior of American cottons 4920
Puasson breakage prediction method on BD-200 rotor spinners, filament yarns 4113
ring and rotor spinning. comparative study of cotton, polyester and blend yarns 3389
rotor spinners, laser double anemometry 4695
rotor spinning demands for finer, stronger, longer fiber properties 3356
rotor spinning of acrylic and polypropylene fibers and blends. effects on yarn quality 7377
rotor spinning of cotton and cotton waste yarns 4933
rotor spinning of cotton/polyester (Lavsan) yarns, properties 147
rotor spinning, effect of environment 1710
rotor spun cotton yarns. loop length 6612
rotor spun cotton. comparison of processing quality of gin-cleaned cotton versus mill-cleaned 6452
rotor spun doubled yarns 5754
rotor, balloon shape, tension control, yarn guide displacement 4934
rotor, fiber friction levels. data used to develop lubricants 4935
rotor-spun viscose fiber. effect of spinning on fiber configuration 8694
rotor. breakages. discovery of causes leading to a possible solution 6583
rotor. cotton yarns. geometry and dimensional stability 5460
rotor. future prospects. short staple fibers, Reiter 4929
rotor. influence of fine fibers on spinning processes and productivity 6590
rotor. P500 computerized yarn clearer and yarn quality and

production cost 7143
Schubert and Salzer's Ru 14 Spincomat. automatic open end rotor spinning machine 5778
spun yarns, general characteristics. Polish yarn quality, effects on weaving 4152
United States cottons. rotor spinning performance study 2520
viscose staple fiber. fiber length and yarn quality 6591
viscose, manmade, variation in length allowable for rotor spinning 4943
wool fabric wastes, re-use and processing methods and machinery 104
yarn diameter measurement detector. data transferred to central computer for quality analysis (Trade Lit.) 8183
yarn quality. effect of number of draw-frame passages 6571
Zellweger's yarn fault detection system 8176

SPINNING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS AUTOMATION, BALLOONS, BOBBINS, CLEANING OF MACHINERY, COTTON SYSTEM MACHINERY, CREELS, DRAFTING MACHINERY, DRAFTING ROLLS, DRAWING MACHINERY, MONITORING SYSTEMS, RINGS AND TRAVELERS, SPINDLES, SPINNING MACHINERY-- OPEN END, TOW PROCESSING, UNIFORMITY, WASTE--FIBROUS, WOOLEN SYSTEM MACHINERY, WORSTED SYSTEM MACHINERY, YARN MANUFACTURING, YARNS)
Amital's efficiency through preparation and cleaning 8839
automation and process linking 2511
breaks. measures for prevention 8180
BUDA-FLAX. modernization of spinning, weaving, and finishing machinery 3872
cans, spinning, model S7 from Gmoehling 5787
Cerifil from Cerit. long staple spinning system 5781
Cerifil worsted spinning frame 5782
Cerifil. long staple spinning system for fine wools at high speeds 5780
combined spinning and twisting of polyacrylonitrile high bulk yarns on SKF-1 and SKF-2, industrial applications 150
compact spinning systems for in-house extrusion from various manufacturers 2464
comparison of various methods. economic and technical 2512
Computer Integrated Spinning (CIS) systems 5762
DREF-II friction spinning. air flow field 6592
Enterprise Machine and Development Corporation, United States producer of air jet texturing machines 6603
Fehrer's Dref-3 friction spinning machine. technical yarns 5745
Flexible Manufacturing System (FMS) from Rieter 7156
friction spinning machine, DREF 3. Fehrer 4939
friction spinning. possibilities for the future in relation to other methods 3351
Gemmil & Dunsmore Paraspin fancy yarn wrap spinning machine 3357
Heberlein Hispano Hispamatic-II ring spinning system. machine features 3358
INA-V drafting system for ring spinning frame 2507
Italian machinery developments. weaving, spinning, dyeing 4740
ITMA [1987] exhibit highlights. yarn manufacturing 148
ITMA [1987] exhibit profile of featured machinery 4788
ITMA [1987] highlights. ring spinning. roving. friction, air jet and rotor spinning 107
ITMA [1987] offerings 2495
ITMA [1987] overview. spinning. rotor speeds. spindle drives 941
ITMA [1987] spinning technologies 2515
ITMA [1987], spinning innovations. mills in the year [2000]. trends 5774
ITMA [1987]. cotton spinning highlights 942
ITMA [1987]. detailed survey 5593
ITMA [1987]. developments in spinning technology 8179
ITMA [1987]. highlights. spinning. weaving. knitting 2306
ITMA [1987]. Japanese developments. computer integrated machinery 8840
ITMA [1987]. link system, Mayer Coner 5788
ITMA [1987]. linking spinning machinery to improve productivity 3324
ITMA [1987]. offerings in worsted spinning systems and yarn preparatory machinery 3323
ITMA [1987]. short staple spinning machinery. refinements in transport systems, automatic doffing 3359
ITMA [1987]. short staple spinning machinery 5789
ITMA [1987]. spinning and spinning preparation machinery 5750
ITMA [1987]. staple fiber spinning and regeneration machinery 953
ITMA [1987]. trends in long staple spinning machinery 5764
ITMA [1987]. trends. spinning and weaving highlights 1522
ITMA [1987]. unconventional spinning systems 3366
ITMA [1987]. unconventional spinning trends 954
ITMF survey of world demand for textile machinery 6374
jute spinning frame types FC522 and C561. tension analysis 133
link-spinning concept 6594
Marzoli's NSL/L-2 ring spinning frame 4084
motor drive systems, individual, from SKS 4119
Murata. profile of machinery 5783
new twist system for the PS-100 flax ring spinner, reduced tension and breakage 4129
Nitro-Dur-Micron nitride steel flange rings have long lifetime 8171
noise and vibration of ring and open end machinery 6381
noise from ring spinning frames 756
Officine Gaudino. design and manufacture woolen and semi-worsted ring spinning frames 1704
P-75-ShG ring spinner for wool, polyacrylonitrile, wool blends 4936
PB-114Sh balloonless ring for wool. defects, increased slubbing during winding 4115
Platt-Saco Lowell Masterspinner, advantages of its use 1705
Plyfil from Spindelfabrik Suessen. spinning/assembly winding machine 3360
Plyfil Spin Assembly winder from Suesseh, two models for long and short staple. machine characteristics, end products 3361
Plyfil spin assembly winder system by Spindelfabrik Suessen, specifications 994
Polish made machinery compared with machinery from developed countries 2523
polyester/cotton yarn evenness improved in Chinese spinning mill 4976
polypropylene and polyester. short spinning line using circular heads and annular spinnerettes 911
Prenomit spinning process developed in Bulgaria. technology. types of yarns produced 1706
preparation, spinning, Crosrol Hergeth 5742
QK 18 sensor for fiber flow data collection on PF-1R spinner, tests 4116
ring spinner, CF 43. Schlumberger 8184
ring spinning frame from Textima. drawing and knitting models 7189
ring spinning machine Model 2122 K from Textima. worsted yarns 3364
ring spinning machine model Filamab 900. for long staple wool, manmades, and blends 3365
ring spinning machinery exhibited at Paris ITMA reviewed. future prospects 955
ring spinning replaced with rotor spinning machines at Bibb 8835
ring spinning, future. competition from other methods 3354
ring, friction, warp, jet, and rotor spinning methods reviewed and compared 3355
Ring-DREF spinning machine from Ernst Fehrer, eliminates roving 6593
Rositta of Holland. modernization of its spinning mills. yarn preparation, rotor spinning 3362
rotary screw air compressors reduce energy costs and production time 5540
Saurer-Allma ESP-SX spinner for novelty yarns, tests on yarns 149
Saurer-Allma's ESP spin twisters for novelty yarns 3363
Saurer-Allma's ESP-1 and ESP-2 hollow spindle fancy yarn doubling machines 5784
SC 4000 spindle setting instrument from RES Messgerate 3348
Schlumberger & Cie. company history 8787

Schlumberger's Model CF 43 ring spinning machine 5767
Schlumberger. company profile 4937
SFK-1 self twist spinning system for PSK-225-ShG spinners, abilities 4117
sheds. ambient ionization and effect on sanitation 5553
shipments summary [1987]. world textile machinery market highlights 8841
Siegling's Extremultus spindle belt for high speed ring spinning machines 5768
SiroSpun system for short staple fibers. Schlafhorst 5792
SiroSpun. short staple spinning from Zinser 5785
Spindelfabrik Suessen's Plyfil spin-assembly-winder machines. system features, operation 130
spindle's angle, kinematic analysis for tape drive, tension control, spindle bearings 4940
spindles and rotors decreasing in Japan, winding and combing machinery gets attention 6595
spinning mill production costs through computer simulation 3917
spinning rollers. covers 2516
Superba Yarn Tester. automatic control device 5786
Sussen Parafil hollow spindle machine 8815
tension unit, HH-FB. fine yarn. Hacoba 5790
top arm drafting system modified to improve yarn quality 5791
VEB Spinner Factory's 2112/K air jet driven ring spinner, abilities, yarns 4118
VTS-05 spindle from Volkmann. two-for-one cabling 8196
weaving. preparation for and importance to the evolution of weaving mills 2585
wool, worsted system spinning machinery from Cognetex, Zinser, and Uster 956
wrap spinner, MG 10. Schlumberger 8186
wrap spinning. concepts, technology, benefits 8185
Wrap Spun Yarns. hollow spindle technology for woven velvet. spinning, dyeing equipment 5769
yarn tension and monitoring spinning machinery 1703
Zinser's Guard system for ring spinning machines. monitors spinning positions 5770

SPINNING MACHINERY--OPEN END

acrylic yarn. effect of yarn extractive device nozzle on loss of twist 2510
aerodynamic design, waste removal devices for rotor spinners 4104
air entanglement machine from Gilbos N.V. computer control with independent steering for each spindle 3371
air jet spinning system, Toray Engineering's AJS-102, retains yarn quality. machine features 3372
air jet, friction, and open end rotor technologies 5779
air jet, wrap, friction, and rotor machinery displayed at the ITMA [1987] 4938
air jet. Heberlein HFP. blending of elastomeric and staple yarns 5741
air jet. Murata's Model 802 MJS machine 5766
Autocoro rotor spinning machine from W. Schlafhorst. improvements 3367
BD-200-Ts rotor spinner with TsYe-1 waste removal system yields less breakage 4941
coating rotors with aluminum oxide to increase work life of PW-11 and PW-12 spinners 4123
compared with Platt-Saco Lowell Masterspinner 1705
Corolab. continuous yarn monitoring system for rotor spinning from Schlafhorst 3368
cotton yarn. effect of air pressure at entrance of rotor cleaning device 2513
development and mechanical principles. increasing importance in world yarn production 8182
developments in short staple spinning 1707
Elitex's installation of microcomputer control in spinning mill for BD spinners 4103
FRS open end spinning machine from Savio 2497
Fruit of the Loom expansion of spinning capacity at Leesburg plant 2270
IPE twist intensifier on BD-200 series rotor spinners, yarn properties 4126
ITMA [1987] exhibit highlights. yarn manufacturing 148
ITMA [1987] highlights. ring spinning. roving. friction, air jet and rotor spinning 107
ITMA [1987], spinning innovations. mills in the year [2000]. trends 5774
ITMA [1987]. detailed survey 5593
ITMA [1987]. developments in spinning technology 8179
ITMA [1987]. ring, rotor, and others. electronics and transport 8187
ITMA [1987]. unconventional spinning trends 954
link-spinning concept 6594
MasterSpinner from Platt Saco Lowell, no spindle-to-spindle variation in yarn 2524
Model BDA 20 open end rotor spinning machine from Strojimport 3369
noise from open end spinning frames 756
open end Controller M.D.1.4. from Otto Stueber 962
opening roller. improvements. effect on tensile strength 2526
PA4 and PA7 aluminum oxide coatings for rotors for abrasion protection 4121
Peomatic fancy yarn system computerized for rotor and DREF friction spinning 7142
PF-R rotor spinner with sensor for core control during core yarn production 143
PPM-120-3 air jet spinner, operational parameters for cotton yarn 4122
rotor spinners, RU 04 and RU 14 from Schubert & Salzer 4124
rotor. Czech BDA 20 machine for cotton and manmade fibers 7378
rotor. dust. results in yarn imperfections 3373
rotor. Elitex BDA 10 N automatic spinning machine 7379
rotor. modified spinning system for Rotona core yarns 8188
rotor. RU 14, RL 20, RSB 51 Autoleveller drawframe, SB 52 drawframe from Schubert & Salzer 4120
Schlumberger. company profile 4937
Schubert and Salzer's Ru 14 Spincomat. automatic open end rotor spinning machine 5778
shipments summary [1987]. world textile machinery market highlights 8841
small diameter rotor wool spinner. comparisons with PPM-240-Sh1 rotor spinner 4942
SMT manufactures components for spinning frames 3370
vibration and noise tested via sound intensity instrument and spectrum analysis 7380
Wifama Type PW-3 rotor spinning machine 2525

SPLICING, SEE KNOTS AND KNOTTING.

SPLIT FIBERS/SLIT FILMS

slit tapes and monofilaments. production systems 8051

SPOOLING, SEE WINDING.

SPORTS PRODUCTS

acoustic baffling wall, flexible, made with Trevira polyester from Hoechst 6037
Allied Fiber's block copolymer nylon, Hydrofil, in high performance socks 3259
Allied Signal develops high performance fiber called Spectra for sports equipment 5627
anoraks. warmth and wind resistance 6242
apparel. thermophysiology and moisture transport. tricots 5154
athleisurewear sports/casual wear concept in Great Britain 8623
Blacky of Switzerland producing polyester fabric apparel for cyclists 2550
bodywear. [summer 1988] fashion trends 2937
Du Pont's Ultratech Orlon socks for athletes, acrylic fiber, properties, composition 6241
Dunova modacrylic fiber in multilayer athletic fabrics 3280
fabrics engineered for athletes and active wear used for everyday apparel 4381
fabrics, synthetics. polypropylene and polyester in tricot knit.

central Europe 4379
fishing rods made from polyacrylonitrile based carbon fibers 1645
hunting apparel. new Cordura blends 5126
Japanese companies produce fabrics for ski apparel 6804
jogging suit pattern. instructions and size tables 3700
knit jerseys. performance testing 8647
knit sports apparel, casual wear [1988] from Soviet apparel manufacturers 5408
Lycra. Du Pont's expansion plans 4857
manufacturing, CB Sports. company profile 7662
MicroPore develops waterproof, breathable fabric with Kynar Flex 2800 film, for outdoor sportswear 6721
MicroPore's MicroTec waterproof, breathable fabric for sports apparel, nylon casted with polymer microporous film 6074
parachutes. use of Kevlar and nylon materials. guidelines 7533
Pellon nonwoven fabrics laminated with Sympatex membrane to obtain new weatherproof fabrics 5097
polytetrafluoroethylene. properties and applications in marine and awnings industries 1674
ski apparel manufacturers' expectations [1988-1989] season. Ski Industry America show 3780
skis, apparel, and ski gear from various Japanese manufacturers 2818
skiwear fashions [fall 1988] exhibited. 34th Annual Ski Industries America Show, prominent trends 3781
Softouch Company, activewear source, management, products, fabrics, sales, future 7019
Super Show for men's activewear manufacturers. crosstraining collections, stretch items, warm-up suits, color, cotton 2900
swimwear from Raj Manufacturing, women's. facility, sewing equipment 7725
Tactel 24 Carat from ICI Fibers. polyamide fabric for high performance sportswear 6799
Teijin and Unitika. fabric for sports apparel which absorbs and evaporates perspiration 6792
tennis strings, extruder from Vollmer Tennis Strings 5633
Toray's Altelec, triple-layer nylon fabric for outdoor applications 6800
Trevira Finesse high tech fabric from Hoechst. water impermeable qualities with no coating 6070
United Kingdom sportswear industry. Puma's marketing activities 2153
woven fabric carrier as leather substrate in footballs 1772

SPUNBONDED, SEE NONWOVEN FABRICS.

SQUEEZING EFFECT, SEE DRYING.

STABILIZING, SEE CREASING AND PLEATING, DURABLE PRESS, SETTING, SHRINKPROOFING.

STAIN RELEASE, SEE SOIL RELEASE FINISHING.

STAIN REPELLENCY, SEE OIL AND WATER REPELLENT FINISHES, SOIL REPELLENT FINISHING.

STAINS (SEE ALSO OTHER HEADINGS, SUCH AS DISCOLORATION, FABRIC DEFECTS, SOILING)
acetate fabrics, removal of stains using acetone cleaners 2051
apparel. spots, adhesive residues from stickers or labels, brought out in drycleaning 4594
applying commercial ink or dye remover to stained acetate fabric 5394
candle wax and oxidized oil stains removed from some table linens with heated perchloroethylene 571
carpet yarns. Stainmaster program by Du Pont 1419
causes and results. stain removing agents and methods 1300
cotton and wool. removal of aged oily stains 2052
cross staining of wool during scouring. methods to minimize 2751
discoloration of fabrics caused by solubility of sizing or finish 2729
down-filled coats. removing splotches caused by solvents 2055
elasticized waistbands, stains. causes, remedy 7010
Fab Industries' [fall 1988] sleepwear line treated with 3M Scotchguard Stain Release. capabilities 1302
mildew. removal with chlorine bleach 584
oil and grease stains on fabric. solvent applicator compounds problem by abrading fabric 8620
oily stains, aged, removed from dyed and undyed cotton and wool 585
oxidative, during jigger dyeing. chemical concentration tests for prevention 8512
oxidized oil stains 586
polarity of substances in stains. appropriate solvents 3748
pre-removal of stains. several methods compared. problems 2081
prespotting. when it is required 7705
protein stains removed from fabric. presoaking with protease 2868
resistance treatments for carpets. Flexnip from Kuesters 5189
resistance. polypropylene fabrics 3549
spotting procedures for silk. types of stains, wet and dry spotting, alkaline color changes 6211
spotting unidentified stains 587
studies of stain removal characteristics of different fabrics, various stain resistant finishes and their efficacy 3749
wetside spots, removal instructions. acid-type stains 1297

STAMYL IS A NYLON 46 FIBER.

STANDARDS, SEE SPECIFICATIONS AND STANDARDS.

STAPLE YARNS, SEE YARN MANUFACTURING--STAPLE YARNS, YARNS, AND UNDER SPECIFIC SUBJECTS SUCH AS COTTON YARN.

STARCH (SEE ALSO OTHER HEADINGS, SUCH AS SIZING AGENTS)
carbamoyl ethyl starch derivatives 8554
printing and dyeing. advantages of starch phosphates 470
processing by enzymes 185
rheology of sizing baths. potato starch derivatives used in blends 1748
structure, short range, long range, aggregating. amylase and amylopecine compared 768

STARCHING, SEE SIZING, SLASHING.

STATIC ELECTRICITY (SEE ALSO OTHER HEADINGS, SUCH AS ANTISTATIC AGENTS, CHEMICAL AIDS TO PROCESSING, HOSIERY, ZETA POTENTIAL)
carpets, electrostatic propensity, safety margin 5472
Carrington antistatic and antibacterial fabrics for hospital garments. components, features, laundering 2668
Clover Cocktail. wool and acrylic blend capable of dissipating static electricity 939
Conflex C and Conflex V. high conductive cellulose fibers, antistatic element in fabrics 3246
electrical conductivity in carpets and floor coverings 2171
electrically conductive nylon fibers for antistatic textiles 902
electrostatic problems with hospital bedding. shock and fabric flammability 2669
electrostatic spinning system for multiple tubular structures 5744
evaluation systems compared, Kanebo versus Faraday's cage method 1438
filter fabrics produced with metallic polyacrylonitrile fibers to eliminate static electricity 321
filter system, electrostatic 8909
Haug ionization systems to discharge static electricity during finishing 5165
IEZ-P, INEP-11D static control, measurement devices 733
influence of fiber content, structure, deformation speed on static charging 4356
laundering and drying apparel. causes and prevention 580
localized electrostatic precipitation versus exhaust ventilation for controlling dust in asbestos mill 8907
manmade, manmade/natural, natural fiber and yarn testing device,

static charging 51
Nitril-Static carpet fibers, reduce static electricity, test results 4037
No Shock Nylon from Monsanto. process and properties 2451
Perrustol Ave. nonionic antistat from Rudolf for wool and manmade fibers 5175
polyacrylonitrile used to synthesize electrically conductive fibers 5646
protease treated Chinon fabric. prevention with tin treatment 1966
quaternary ammonium salts as antistatic agents 3965
reduction in carpets by using Viscostat and copper sulfate 8555
semiconductive glass fibers. General Electric 8054
spin finishing. static control of manmade fibers. finishing agents 6504
Viscostat. viscose fiber containing carbon with anti-static properties 6555

STATISTICAL DATA (SEE ALSO OTHER HEADINGS, SUCH AS FORECASTS, TEXTILE INDUSTRY, AND UNDER SUBJECT HEADINGS OF SPECIFIC BRANCHES OF INDUSTRY, SUCH AS APPAREL INDUSTRY)
apparel production. United States [1987]. selected apparel groups 4597
broadwoven gray fabrics, average weight and width [1977-1982] statistics 2700
broadwoven gray fabrics, average weight and width [1982-1987] statistics 2699
Chinese textile industry, significant growth predicted 8953
cotton. international statistics. spinning, weaving, and raw material consumption data [1985] from textile producing countries 2417
EEC. [1986] balance of trade 1564
EEC. [1986] main suppliers for fibers, fabrics, garments 1566
EEC. [1986] principal customers for fibers, yarns, fabrics, and apparel 1565
EEC. [1986] trade data for fibers, apparel, and general textile products 1567
fiber consumption used as forecaster for apparel consumption 8948
German dyeing industry. prognosis for the future 3195
home furnishing textiles, United States. industry production, trade statistics 8929
India's apparel export industry remains competitive 8583
International Cotton Advisory Committee. world statistics 7994
Italian textile industry. trends and growth 8934
linen industry profile. structure. growth. markets 8228
management. compilation and use in evaluating and planning 8776
manmade fibers. world production. geographical production 4861
manmade staple fiber shipment figures [1987]. percentages to nonwoven roll goods producers 6521
men's wear, United States. industry production, trade statistics 8920
mill consumption of apparel class and carpet class raw wool and manmade fibers surveyed by Census Bureau. [1987] showing increases 4021
nonwovens industry fiber usage patterns in EEC. trends 8230
Pakistan. [1986-1987] cotton situation. prices. trade research 7982
printing industry developments, [1984-1987] worldwide survey 1953
production and consumption of cotton 8941
sheets, pillowcases and towels, total United States shipments, [1984-1987] statistics 2380
spinning and weaving machinery. [1987] shipments survey. world market highlights 8841
statistics on synthetic fiber and yarn production and trade in India 7975
textile industry in Surat India. sales revenue, investments, profitability, economics 7857
United States and world cotton situation and [1988] outlook 8940
United States Commerce Department's report [January 1988] textile and apparel imports 3162
United States first quarter [1988] shipments. men's. women's. misses'. juniors' 8585
United States per capita consumption of fibers, survey 4803
wool industry statistics, New Zealand. [1987-1988] season 8936
world production capabilities [1986]. ITMF Report 6412
world textile trade and production trends 8955
world trade in textiles and apparel. industrialized and third world nations 8959
worldwide consumption of fibers [1964-1986] 8942
worldwide manmade fiber manufacturing 7983

STATISTICAL METHODS (SEE ALSO OTHER HEADINGS, SUCH AS OPERATIONS RESEARCH, QUALITY CONTROL, TEXTILE TESTING)
automotive fabrics. statistical service life prediction criteria 7070
cotton fiber properties measured by HVI system. statistical analysis 7059
fiber consumption used as forecaster for apparel consumption 8948
fundamentals of statistics and applications in textile field 1502
management. compilation and use in evaluating and planning 8776
permeability testing classification of footwear fabrics, qualitative and quantitative methods 5121
polymeric antimigrants. statistical analysis of cost and performance 8468
quality management. statistical process control techniques 8823
SPC implemented at Monsanto (Conf. Paper) 8762
SPC system. implementation (Conf. Paper) 8761
Statistical Process Control for manufacturing (Conf. Paper) 8765
structural coefficient used to match fabric type with a suitable loom 5157
synthetic yarn deformation process. statistical modeling 3822
weighing system. Statistical Process Control (Conf. Paper) 8760
wet processing experiments 7046
wool regain testing. standard deviation between individual core samples 2209
yarn posture during interlacing 4982
zero-crossings for metameric blacks 3853

STEAMING (SEE ALSO OTHER HEADINGS, SUCH AS CONDITIONING, DECATING, PRINTING, SETTING)
acrylic/viscose blends 6078
automatic garment feeding into steam tunnel. streamlining polyester/cotton workwear processing 2069
cabinet, finishing. Sussman's LS 2000-Tunnelfinisher 8580
characteristics of steam, trapping system for drycleaners 6219
control of parameters. Spriano's Tosdisc 211D control system 8933
discharge and relief printing methods in nylon blends. eliminating shrinkage during steaming 391
Fabri-Zone steam finishing process by Fabri-Zone International for carpet fibers 4505
fabric setting steamers. modification to serve as curing machines 8537
Fleissner. manmade fiber production machinery 5743
Fleissner. steam flow washer and dryer 5276
frame and hanging systems. steam tunnels 1301
high temperature steaming to fix printing dyes. factors and problems 1961
ITMA [1987]. making up and packing machinery 6185
Kleber Model 2000 and 64 pleating machines and DS Model Bello steam chamber (Trade Lit.) 8576
knitting machinery. trends in finishing. flat and foam 3563
Laura Ashley's Helmond plant, new steamer from Stork Brabant 6137
multi-function steamer 499
noise control measures for steam injection operations, to comply with EEC directive 5552
One Yarn Spirovap machine, type WP/MU from Superba. new Modular steaming machines 3383
pretreatment of knitted fabrics. machinery 401
pretreatment range, computer controlled four-stage. Babcock 4410
Roller-Bed ARTOS steamer Klopman. summary 6362
Rucogen NZA developed by Rudolf to remove non-fixated hydrolyzed dyes 5160
saturated steam applied to cocoons improves raw silk appearance

6476
screen steamer type ZZ-4/260-1, for filament yarn fabrics and dye fixation 5334
Serracant's tow dyeing, steaming, and milling/scouring units 6094
silk ply yarns. influence of tension, time and temperature on properties 5784
sock boarding machine, TF-96 from Firsan 3722
Sockpress C from Heliot. boarding machine for socks and half-hose 7659
Steamloc, Vaporloc machines from Mather 2719
Superba Type WP/FU machine for steaming high bulk acrylic yarns. design and technical characteristics 2531
Superba's Spirovap WP/FU for finishing high-bulk synthetic yarns, economical relaxing of yarns, softening of the hand 1989
Vaporloc Pressure Steamer from Mather Machinery for fabric treatments 6841
VH-Tric-O-Steam unit from Vald. Henriksen discussed at recent symposium 5312
wool and flax woven apparel fabrics, deformation during steaming, effects, tests 4358
wool yarn steamer installed in the automated transportation system 487

STENTERING, SEE TENTERING.

STERILIZING, SEE GERMPROOFING.

STITCHBONDED FABRICS (SEE ALSO OTHER HEADINGS, SUCH AS NEEDLED FABRICS, NONWOVEN FABRICS)
Malimo Schusspol and Malifol stitchbonders in film, tape applications 6730
Malimo stitchbonded nonwovens from the Malivlies N 2400 unit 3506
Malimo stitchbonded packing fabric 3507
needle's force, fabric deformation, influences, tests 5102
nonwoven and Malimo fabric composites. material properties 1798
nonwoven products [1988]. compositions, uses, production methods 5150
pearl effects on stitchbonded nonwovens using Tanaprint CR finish 5294
Tex-o-Drain filter from Texel. needlepunched polyester sandwiched around polyethylene core 6770

STITCHBONDING MACHINERY
Arachne N1 knitting machines 5917
carpet manufacturing and processing machinery displayed at ITMA [1987] in Paris 1001
cotton knitting, stitch bonding, and crocheting machinery [1987] ITMA 2612
flexural vibrations, computer analysis, design of machinery and drive 7171
Malimo Schusspol and Malifol stitchbonders in film, tape applications 6730
Malimo stitchbonded nonwovens from the Malivlies N 2400 unit 3506
Metap knit-weaving. special purpose fabrics with synthetic fibers 4297
needle load sensor device, improved needle design 6731
needle's force, fabric deformation, influences, tests 5102
sew/knit patent. East Germany 8307

STOP MOTION DEVICES (SEE ALSO OTHER SPECIFIC MACHINERY)
computer control for warper, angle of spindle rotation, brakes 4170
Karl Mayer's yarn tension control devices type KDF 5845 KFW1250 and 2450 from Grob 8269
MW knit fabric inspection unit manufactured by Erwin Sick for circular knitting machines 8287
Picanol manufactures Pre-winder Switch Off for automated weft repair on GTM rapier looms (Trade Lit.) 8248
Prokostop 4408 computer controlled warp sheet monitoring device 8270
roving stop motion, from SKS 4119
Sick's NK 31 stop motion device, prevents needle breakage defects 250
starting bar defects in fabrics analyzed with microprocessor 8709
Trip-Lite's new product lines in yarn feeding and stop motion machines 4159
twisting. effects on other processing factors. computerized determination 4947
Valentin Rius Clapers. product line 5826

STORAGE, SEE MATERIALS HANDLING.

STRETCH FABRICS (SEE ALSO OTHER HEADINGS, SUCH AS ELASTIC FABRICS, KNIT FABRICS)
wet-finishing machinery from Benninger equipped with alternating current to facilitate processing 5173

STRETCH YARNS, SEE ELASTIC YARNS, TEXTURED YARNS.

STRIPPING OF BOBBINS, SEE BOBBINS.

STRIPPING OF DYES
silk and wool, color changes from alkalies 7636

STRUCTURAL FIBERS, SEE LEAF FIBERS.

STUFFER BOX CRIMPING, SEE CRIMPING.

SUBLISTATIC PROCESS, SEE PRINTING.

SUL'FON-T IS A NYLON FIBER.

SUPPLEX IS A NYLON 6 FIBER.

SUPRENKA IS A RAYON FIBER.

SURFACE ACTIVE AGENTS (SEE ALSO OTHER HEADINGS, SUCH AS DETERGENTS, TEXTILE CHEMICALS)
absorption by wool yarn 8170
acid dye interaction with non-ionic surfactants. spectrophotometric studies 4462
air and argon plasma, ultraviolet radiation effect on polyethylene terephthalate free surface energy 4888
alkoxylate, narrow distribution. producing nonionic surfactants, applications 1546
alternatives to alkylphenolethoxylates in textile processing 7198
Amsoline F surfactant, uniform dyeing of wool, nylon fabrics 5228
aqueous solutions containing tetrasodium or tetrapotassium pyrophosphate and anionic surfactant 1905
biodegradability of detergents, uses 6389
cleaning. activity independent on conditions 6220
complex formation with hydroxide ions from catalyst 7925
detection. in solution and on fabric surfaces 8723
disperse azo dyes. anionic surfactants. wastewater toxicity reduced 7909
environmental and health problems 6376
fluoroplastic fibers. manganese dioxide dispersions in formaldehyde with surface active agents 8062
ionic surfactants and polyampholytes formations, and ionic surfactants and synthetic polypeptides formations 915
modified suint scouring with nonionic surfactant and alkaline builders 8462
nonionic surface active agents. wastewater cleanup with foam separation flotation method 8913
nonionic surface active substances. sorption by polyamide yarn 3392
nonionic surfactants in wool. method for estimating concentration and distribution on wool 6481
oil solubilization kinetics and geometry of surfactant structure 2082
oleochemical surfactants and lubricants profile 8556
penetration into immersed fabric. advancing contact angle 1978
polyacrylonitrile fibers. effect of sodium dodecyl sulfate on

deposition of polymeric lattices 8016
polyvinyl alcohol, improved solubility with surface active agent added during size preparation 1465
production [1984-1986] in Japan 8783
Sandozin EH Liquid. wetting agent for dyeing cellulose 5299
scouring, prewetting, and rewetting wool yarn 7575
Sirrix CRC Liquid. wetting agent 5177
synergism in foaming. binary mixtures of surfactants 4402
test methods 6849
test to determine amount of oxyethylated alkylphenol in dye waste water 4767
testing. determination of residual surfactant traces on woven cotton fabrics through thin-layer chromatography 4696
Tkanol washing agent with surfactants for oil spot removal 5308
turbidity behavior of nonionic tensides. additives, significance for washing 488
Vitexol D. defoamer from BASF 5196
waxing cotton and Terocel warps with surfactants to reduce friction 3418
wool processing for dyeing at lower temperatures 8498

SURGICAL PRODUCTS (SEE ALSO OTHER HEADINGS, SUCH AS HEALTHCARE AND MEDICAL TEXTILES, SANITARY NAPKINS AND TAMPONS)
absorbable surgical articles. caprolactone and glycolide/lactide copolymers with new properties 7355
absorbent characteristics of nonwovens. fluids 6076
biomaterials. surface structure and biocompatibility 3311
calcium hydroxyapatite fiber for synthetic biological implants 8132
carboxymethylated viscose yarn, twist effect on properties 4974
copolymer glycolide and trimethylene carbonate for sutures, bioabsorbable. easier knotting 8559
dressing from Kendall. improved sorption and liquid transfer 8419
dressings of segmented block polymer from Thoratec 7750
Ethicon patents electrostatic spinning apparatus for manufacturing vascular grafts 6243
graft. synthetic vascular. for blood vessels smaller than six millimeters in diameter 7744
grafts, vascular. from Toray. made of ultra-fine fibers 7751
hollow fiber plasmapheresis module. Du Pont 8133
implants. hydroxyapatite, synthetic fibrous form from Toa Menryo Kyogo. potential for use 7322
melt blown fabrics. Exxon process 6061
microglass from Bayer 8053
nonwoven fabrics. growth opportunities 6018
requirements of textiles for human implantation (Abstracts) 8396
small diameter vascular graft manufactured by warp or weft knitting or weaving 2697
Spunlace fabrics. production process and applications 6075
sterilization, hydrogen peroxide vapor 5819
Surgikos patents new surgical fabric 6244
tubes, vascular prosthesis. electrostatic spinning of polyurethane 5990
warp-knitted applications, overview 8397

SUTURES, SEE SURGICAL PRODUCTS.

SYNTHETIC FIBERS, SEE MANMADE FIBERS.

TACTEL IS A NYLON 6 FIBER.

TAKLAN IS AN ACRYLIC FIBER.

TAMPONS, SEE SANITARY NAPKINS AND TAMPONS.

TANGLE LACED, SEE NONWOVEN FABRIC MANUFACTURE.

TARNEL 75 IS A CARBON FIBER.

TASLAN PROCESS, SEE CRIMPING, CRIMPING MACHINERY.

TEFLON IS A FLUOROCARBON FIBER.

TEKMILON IS A HIGH MODULUS (POLYETHYLENE) FIBER.

TEMPERATURE (SEE ALSO OTHER HEADINGS, SUCH AS HEAT PHENOMENA)
acrylic fibers. water content and glass transition temperatures 3248
air permeability of wet fabrics. interaction of clearance factor and capillary structure 8386
carbon fiber reinforced polyether ether ketone laminates. temperature distribution and thermal cycling 7470
ceramic fiber yarn and webbing, asbestos substitutes for high temperature applications 870
composites, fiber reinforced metal. interfacial reaction between fiber and molten metal causes weakening of fiber 8369
condensation temperature and formaldehyde release in durable press cotton and polyester fabrics 8557
control of temperature, humidity, air motion in a drycleaning plant. health and productivity of employees 6380
digital control for sizer drying area. temperature, speed, moisture in warp 5000
effect on fixation rates of low and high affinity reactive dyes. cotton 424
effect on water retention of textile fibers and their conditioned weight 7818
finishing. Gossen's Pantatherm D4 temperature control system 4411
Fregon filters control temperature and humidity in refrigerators 6763
glass transition temperature soluble aramids 921
Haug ionization systems to discharge static electricity during finishing 5165
hygrothermomechanical fiber composite fatigue. simulation 4328
melting temperature of branched low density polyethylene gel 5559
nonwoven web manufacture 3503
perception of temperature relative to textiles. maximum heat flux 1458
polyethylene glycol bound to cotton and cotton polyester blends imparts temperature adaptable properties 477
polyethylene terephthalate. flow behavior and spinning conditions 908
resistant. needle punched felt 1168
slashing, weaving cotton yarn, humidity and temperature parameters influenced by the size and drying process 4994
Soviet cotton spinning mill, air conditioning system reduces yarn breakages 5531
still air layer adhering to plastic plates and fabric. thickness 2664
thermally cycled high temperature laminates. microcracking behavior 4339

TEMPLES, SEE LOOMS.

TENSION
ball bearings on two beam looms, reduced tension unevenness, vibration, defects 4193
balloon. equation based on data for warping procedure 5002
composites, carbon/carbon. testing single fiber bundles for axial tension to failure 658
core fibers of lesser quality in ring spun staple yarn. calculation of idle zone 4977
cotton weft and warp yarn breakage on shuttleless looms. tension, yarn properties, tests 212
cotton yarn resistance along the back rest, lam, and heddles on the ATPR rapier loom 5029
cotton, tensile testing, formulas for rigidity modulus 179
Davies Eurotech's Qualitex yarn tension device using balls 4157
fiber fatigue tester based on biaxial rotation for fibers in vacuum and gaseous environments 3816
footwear creep ascertained by shaped lever tester 5106
friction spinning. yarn tensions 4109
hard twist filament yarn. tension generated by twister with false twist spindle 2527
jute spinning frame types FC522 and C561. tension analysis 133
knitting force tester 5056

knitting machine take-up, new designs for equalization 6704
Lawson-Hemphill continuous yarn tension tester 7100
leather relaxation from moisture, formula to determine tension levels 672
mathematical model of tension state on beams 4172
measuring system for tensile strength, from FAG-Hammelburg and Retech 6270
nylon 6 heat set carpet yarn. tension effects. thermomechanical analysis 966
nylon ribbon. tension levels, parameters 5033
off-axis tension test for composites. new tab end design 7824
Oy Tech Center. yarn tension monitored electronically on weft knitting machines 6713
polymers. early stages of crystallization 4876
rollers. simulation of abrasion, deformation, rigidity, strength, torsion, tension 4711
rotor, balloon shape, tension control, yarn guide displacement 4934
rub felting. wool. effects of tension 1264
shed axes, upper and lower, different tension levels cause yarn deformation 226
silk fibroin films, regenerated. effect of structural changes on surface tensions 825
spindle's angle, kinematic analysis for tape drive, tension control, spindle bearings 4940
spinning, ring. tension in balloon after yarn breakage. automated splicing machine 141
staple fiber bundles in tension. tangent compliance 3
structural base, relation to tension damage resistance, woven, needled, knit bases 5100
systems for high speed creels from Benninger 8241
textured yarn pirn winding tension. affect on fabric properties 3417
thermoplastic composite part formation. tension 4340
two filament twisted yarn. yarn tension as function of extension 2547
warp and weft on rapier and projectile looms. weaving speed 2586
warp ends. control. Benninger Supertronic 3420
warp tension uneven when shed open, tests, method to determine, prevention 4212
warp. importance in energy conservation during weaving 4211
warps. contribution to selvage floats in weaving 8255
washing. tension levels affect shrinkage and dye desorption, tests on fabric structure and fiber content 5311
weaving. tension caused by cotton yarn knots, factors, best knots for weaving 4209
weaving. tension levels on warp and weft yarns 4208
yarn joints in all-wool yarns. effect on tension of running yarn 207
yarn tension as function of extension 2541
yarn tension during sliding. wrapping curve on torus surface 6272
yarn tension examined in terms of guide diameter and yarn linear density 943
yarn wrapping curve on torus surface and tension variation during tangential sliding 7382
yarn. critical parameters in spinning for monitoring machinery 1703
yarns. effects on wool, cotton, nylon. parameters for speed and tension 4145

TENSION CONTROL DEVICES (SEE ALSO OTHER HEADINGS, SUCH AS MONITORING SYSTEMS AND UNDER SUBJECT HEADINGS OF SPECIFIC MACHINERY)

automatic section tension control in new UZ type Benninger tensioners 7403
Benninger thread tensioner model UZ for beaming of yarn from parallel creel 5846
creel braking system. tension control between creel section beam and size box 1734
Davies Eurotech's Qualitex yarn tension device using balls 4157
Hacoba HH-FB fine yarn 5790
ITMA [1987]. electronic control. yarn tensioning devices 6636
ITMA [1987]. false twist and air texturing machinery 4960
ITMA [1987]. weaving preparation 5856
Karl Mayer's DS 65/40 direct warping installation 5833
Karl Mayer's yarn tension control devices type KDF 5845
knitting force tester. monitors yarn tension 5056
knitting machine accessories and sock knitting machines featured at [1987] ITMA 3469
Memminger's EFS electronic, tension controlled feeder 4262
model EFS yarn feeder form Memminger. resolves production problems in sock manufacture 6688
Sensofil by Stoll. device for CMS Selectanit flat machines 8318
Sensofil tension compensating unit for Stoll CMS Selectanit flat knitting machines 6710
systems for high speed creels from Benninger 8241
Tamarack Sales' two new yarn tension control devices, 502 and 402 models 3133
tensiometers, mechanical and electronic. from Hans Schmidt 8695
thread tensioner. type UZ from Benninger 988
Valentin Rius Clapers. product line 5826
warp regulator, continuous action, tested on ATPR-100-2 rapier loom 208
warp setting option on Supertronic warper by Benninger 6666
warp tension ring of triaxial loom. method for design of curve 8328
warping creels manufactured by Benninger 3413
warping. ENP electromagnetic device. mathematical analysis 187
weft accumulator units Nova and Laser from IRO. automatic speed control 5020
winding uneven yarns. tension washer inertia 6622
yarn tension fluctuations during weft insertion on air jet looms 1007
yarn tension unit, type UB. Benninger 5793

TENTERING (SEE ALSO OTHER HEADINGS, SUCH AS DRYING, SETTING)

alternative. heat setting of manmade blends in India 6160
atmospheric superheated steam drying 1267
automation and computer control. quality control 5335
fumes produced during thermal treatment. experimental study 3137
gas burner and control system combination. fully modulating. tenter applications 5336
Impinjet scrubbers for dust collection, gas absorption, stripping of gases, gas cooling, vapor condensation 5549
polyester/cellulose blends. durations for drying, heat setting, and curing, mill trials to establish 8581
productivity. ITMA [1987] exhibition and finishing technology 4408
superheated steam drying. author criticizes earlier article by D. Hampshire 1268

TENTERING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS DRYING MACHINERY)

Brueckner's new tentering, drying, and setting machine with horizontal chain reversal 7656
China's plans to produce domestically 3154
comparison of systems and operating principles 8582
development of optimum durations for drying, heat setting, curing 8581
dryers. cost analysis of old and new models 8568
energy reduction, modernization of tentering machinery, resultant savings 4506
gas burner and control system combination. fully modulating. tenter applications 5336
Impinjet scrubbers for dust collection, gas absorption, stripping of gases, gas cooling, vapor condensation 5549
mechanical finishing machinery at ITMA [1987]. consolidation and control instead of innovation 3673
Monforts' Montex tenter with MSPS production control 3679
pad-chain mercerizing machine. tenter frame. sodium hydroxide recovery 6838
pretreatment of knitted fabrics. machinery 401

TERMS, SEE TEXTILE TERMS.

TERRY FABRICS (SEE ALSO OTHER HEADINGS, SUCH AS PILE FABRICS)

Dundee Mills profile. new warp knitting operations for terry towels 1791

fabric softeners during drycleaning, effect on terrycloth towels 579
looms, rapier. S-D 400SE from Saurer-Diedrichs 6660
softening agents. effect on absorbency, whiteness, and hand 581
spinning machine, rotor, from W. Schlafhorst. improvements 3367
thermal bonding equipment for nonwovens from a variety of international companies 3504
towels, printing 5292
warp knitting machinery. production 264
Wetsafe waterproofed terry toweling with a PVC resin backing 1434

TERRY LOOMS, SEE PILE FABRIC LOOMS.

TERYLENE IS A POLYESTER FIBER.

TESTING, SEE TEXTILE TESTING AND UNDER SUBJECT HEADINGS OF SPECIFIC FIBERS, YARNS, FABRICS, AND PROCESSES.

TETORON IS A POLYESTER FIBER.

TEXTILE CALCULATIONS
aerodynamic design, waste removal devices for rotor spinners 4104
algorithm for roller abrasion, deformation, rigidity, strength, torsion, and tension 4711
alkali cellulose. alkali distribution. phase transitions in mercerization 8460
amalgamation of Wright and Guild color mixture data 2224
analytic method to control raw material consumption, parameters 5039
apparel pattern pieces with computer design system for processing size calculations 3729
asbestos substitutes. formulae for approximating linear density of equivalent yarns 2489
batch polymer dissolution processes. calculation algorithm 7324
bunker feeder field sensors, calculations to control fiber layer uniformity 108
calculation of bearing capacity, failure modes of reinforced soil bearing walls 6773
cellulose acetate. estimation of molecular weight 3966
cellulose films. calculating destructive stress at break 7318
classical bearing capacity theory for geotextile reinforced embankment failure refuted 7763
combustion, spontaneous, of fiber in ventilation, filtration systems, formulas 736
components, trimmings, molded on centrifugal force field device, parameters 5360
computer color matching. linear and quadratic optimization algorithms 2228
computer testing of needle-key zone load 7159
continuous thermal fixation dyeing polyester/cotton fabric. color yield 1922
core fibers of lesser quality in ring spun staple yarn. calculation of idle zone 4977
cyclic diagram calculation, shed formation, heddle action 4204
determination of rheological properties of dyestuffs 3862
development of a textile-oriented expert system 7149
differential equation, relationship of fabric and dye, color intensity 4474
disperse dyeing. mathematical expression of rate constants in empirical rate of dyeing equations 2765
drafting sliver. beta adjustment technique 8158
drycleaning industry. Data-Becker's Kalkumat program for the drycleaning industry 4563
drying triacetate fibers, movement with oscillating air fluidized bed 494
dye conversion ratios. ICI Procion H-E, H-EXL, H(P), and MX dyes (Trade Lit.) 8518
dyeing, cationic dyes. uptake curves, diffusion coefficients, time lag 6103
dynamic load, vibrations, equations to calculate six frequencies of free oscillation 5012
elastic components to equalize inertia in knitting machinery 7158
electron shape in field sensors, formula, automated systems 5519
epsilon-caprolactam. thermodynamic characteristics 8095
evaluation of geotextile characteristics for drainage layer suitability 6775
fabric pilling. tension formula. prediction of resistance to pilling for woven fabrics 4357
filament yarns in the shed, optimal number, formulas 214
finite element analysis to calculate geotextile reinforced earthwork deformation 7830
foam printing pastes. rheology. constitutive equation 471
formula for spindle power consumption without bobbin variable 8178
formula for warp knit fabric development from filament yarns 8691
formula to determine amounts of various fibers in a blend yarn, example 4658
formula, structural coefficient, analysis of loom suitability 5157
geometric design of drive gear between two spindles 5527
geotextile parameters for optimum reinforcement of unpaved roads 7789
geotextiles. mathematical model for determining minimum requirements for desired roadbed characteristics 7842
heat exchange between yarns and contact surfaces 4959
helical model of the plain stitch, relation to fabric thickness 1778
high modulus viscose. determination of sulfuric acid in precipitation bath 3810
ink mixing behavior. modeling with polynomials 2235
light penetrability of woven and knitted fabrics, formula 311
liquid media mixers. efficiency evaluation 8063
looms, cam driven. calculating shedding cam pressure angle 7411
mathematical calculations of fiber properties used to engineer textiles 5155
mathematical model of tension state on beams 4172
mathematical model, flow in spin bath 5632
model, based on filtration, liquid filling during impregnation 5307
multilevel shed dobby for rapier looms, parameters, calculating limitations 5032
narrow fabric loom latch needles. selvages and loads 7166
needle latch design of circular knitting machines. calculation of latch rigidity 7160
needle-sinker, formulaic design method 5075
pattern development for knit fabrics, efficient use and CAD accuracy 5373
polymer application to artificial leather, model 6155
polyvinyl chloride fabrics, calendering tests, production environment 5316
precision winding. ideal decimal fraction for anti-ribbon 192
pressing machinery rollers, heat distribution, formulas 551
pressure flow on non-Newtonian fluids between eccentric double cylinders 3043
program based on economic model of material consumption in apparel plant 6356
program for ideal pressure between rollers and fiber to eliminate deformation 4722
programming in BASIC, introduction, graphics 8795
quasi-closed, changes in machinery design, calculation 4173
rapier displacement, early release of weft yarn, formulaic method 5017
restructuring of costing, cost accounting, and profit-and-loss statements in textile plant management 3894
ring spinning. sides allocation 8190
rotation angle shifts due to vibrations on machinery. calculations, control 5026
saponification bath for acetate fibers. determination of iron content 3811
Sausis control for textile transportation. reduce stretching, accuracy 5498
silk cocoon reeling. breakage and filament reduction examined, equations 129
sliver density control for uniformity during carder's output system 114
solubility parameters for transfer printing of cotton pretreated with

ethylene glycols 2776
spindle's angle, kinematic analysis for tape drive, tension control, spindle bearings 4940
spinning balloon equations. wide amplitude balloon theory 151
tear load of flax/polyester staple yarns 5461
tension in balloon, equations based on data for warping procedure 5002
thermal insulation of apparel fabric, mathematical model 5124
Tsai-Wu Tensor Polynomial Strength Criterion. determination of normal interaction term 2214
two filament twisted yarn. yarn tension as function of extension 2547
unevenness in filament linear density of silk. formula for production use 4917
used to determine tear load, width, surface density parameters for new woven wool fabrics 4179
vacuum dyeing of yarn packages, mathematical model 5217
viscoelastic fluids. Poiseulle flow. shear thinning viscosity. effects of second normal stress difference 3970
warp breakage rate. computation 8271
warp yarn, geometric relation from the beam to the back rest to the warp stop motion 5034
washing parameters for printed cotton fabrics 5310
water conductivity of geotextiles. permeability coefficient versus hydraulic loss discharge 7093
weave tightness. coefficient of weaving 227
wool, woven fabrics, pore structure determination, formulas 316
woven fabric density formulas given with consideration for weave 216
woven fabric tightness factor calculations 8718
yarn count conversion. computer program 2290
yarn stretching and heat setting. heating of synthetic yarns 3382
yarn winding angle in package of biconical form 8218

TEXTILE CHEMICALS (SEE ALSO OTHER HEADINGS, SUCH AS ANTIBACTERIAL AGENTS, BLEACHING AGENTS, CHEMICAL AIDS TO PROCESSING, CROSSLINKING, DETERGENTS, DYES AND DYEING ASSISTANTS, ENZYMES, FINISHES, FLAMEPROOFING AGENTS, OIL AND WATER REPELLENT FINISHES, OPTICAL BRIGHTENING AGENTS, PIGMENTS, PRINTING PASTES, RESIN FINISHING AGENTS, SIZING AGENTS, SOFTENING AGENTS, SOIL RELEASE FINISHING, SOIL REPELLENT FINISHING, SURFACE ACTIVE AGENTS, WASH-WEAR, WATERPROOFING AGENTS)
alkaline wastewater from drycleaners, Buse System of acidification 4762
apparel. Fortess, Fred. profile of director of Apparel Research at the Philadelphia College of Textiles and Science 5594
aromatic azo compounds. reaction with ozone 2327
auxiliaries for reducing cellulose powder agglomeration 3565
azo-coupling of 1-naphthol with arenediazonium ions in aqueous solutions 2328
bis(dithiobenzyl) nickel compounds. effect of substituent groups 7926
cationic. multiple colored effects on cotton 3571
Chemical Week [1989] Buyers' Guide 8926
color changes from reactive dye/DMDHEU/resin finishing synergism 8550
Colour Index International. dyes and nomenclatures 7958
Colour Index International. supplemental dye and colorant technical, structural information 7959
degumming with soap and synthetic agents 4070
description and characteristics of copolymers for textile finishing 6500
determination of rheological properties of dyestuffs 3862
diarylamine derivatives and 9-arylacridines. synthesis 7928
diarylamine derivatives. synthesis by Chapman reaction 7927
dictionary of textile chemicals, dyes, and agents. trade names 7247
durable press reactants based on cyclic ureas. thermoanalytical characteristics 1185
dyes. synthesis of 9-acridanones by Chapman reaction 8915
electrochemical wastewater treatment with ferrous hydroxide, results 7920
flame retardants. buyers' guide 1904
formaldehyde treatment of resin free fabrics for durable press finish 8544
gas chromatographic testing for perchloroethylene traces in strip cleaned air from drycleaners 5471
hexamethylene diamine. structure. uses. toxicity data 2717
improvement of solvent mileage in drycleaning facilities, benefits and methods 4571
LAM and LLM. steric configuration. influence on antibacterial effect 3553
laundering, drycleaning. German research to protect the environment 7671
liquid ammonia mercerizing as alternative to alkali 3574
molecular segmental mobility and effect on dyeing acrylic fibers 4434
nonionogenic surfactants and influence of dyes on turbidity 3630
olefins. Meerwein arylation reactions with anthraquinone diazonium hydrogen sulfates 2329
oleochemical surfactants and lubricants, use in textile industry 8556
optical brightening. examination of process. structure of agents 8095
organic luminophores with fluorine-containing substituents 1907
perchloroethylene and its future in the drycleaning industry 7704
polyester. recommended discharge and resist chemicals 3641
polyvinyl alcohol. copolymers for different versions of original uses 4165
purification of cotton processing waste water for reuse in industry 4760
review of available products, recent developments in speciality chemicals 1186
silicone aqueous emulsions. determination of silicone content 8742
silicones. chemistry of polysiloxanes 7644
sodium hydroxide solutions. recycling via membrane filtration 4765
sodium hydroxide. recovery and reuse from industrial effluents 4766
solvents, effects West German environmental laws on the industry. recycling developing less harmful solvents 4755
spin finishes. ICI's G-1089 and G-1043 compounds with higher smoke points 8151
test to determine amount of oxyethylated alkylphenol in dye waste water 4767
trade name listing 7241 7248
trade names and manufacturers. dictionary 7240
trade names of textile finishing products from Chemox Industrial, C. D. Corporation 4792
triphenylmethane compounds. synthesis and application as reagents for identification of hydrazine 2330
West German textile industries and new air quality requirements 3947
wet processing, products review 1178

TEXTILE CHEMISTRY, SEE CELLULOSE, CHEMICAL TESTING, KERATIN, POLYMERS AND POLYMERIZATION, RADIOACTIVE TRACERS, TEXTILE CHEMICALS, AND UNDER SUBJECT HEADINGS OF SPECIFIC MATERIALS AND PROCESSES.

TEXTILE DESIGN, SEE APPAREL, FABRIC DESIGN.

TEXTILE EDUCATION (SEE ALSO OTHER HEADINGS, SUCH AS EMPLOYEE TRAINING)
apparel manufacturing technology center opened as classroom, laboratory, demonstration manufacturing operation for industry 5354
apparel manufacturing technology. demonstration centers at FIT, Clemson, Georgia Tech 8600
assessed by Columbia University 7263
Austrian laundry, drycleaning industries. history and development 5592
changes, problems and future demands. international evaluation 7981

conferences. need for improved training programs, technological qualifications 6418
Defense Logistics Agency awards research contracts to three educational institutions 600
design program at Huddersfield Polytechnic 4794
dictionaries. knitting industry. Italian, French, English, German. entries for S-Z 8971
Dornbirn Textile School 4793
East German technical education in apparel technology 3995
education system to promote waste reduction for apparel plants 5595
embroidery school, Japanese, Kurenai Kai 4540
enrollment declines for United States schools. reasons for low enrollment. study in nonwovens field 2398
exchange program. College of Technology and Economics in Reutlingen and Ecole Superieure des Industries Textiles de Lyon 8973
Federal Textile School, Vienna, Austria 7256
Fortess, Fred. profile of director of Apparel Research at the Philadelphia College of Textiles and Science 5594
geomembranes. promotion and applications 3188
German textile apprenticeships. attitudes toward work and careers 3997
German textile trade apprenticeships decline 3996
Germany. technical apprentices. opinions on training and instruction 7980
goals and curricula, suggestions for improvement 5596
Gottlieb-Daimler School in West Germany. journeyman and master candidate projects 4639
graduate course at Iowa State University integrates clothing construction and fabric characteristics. student study, results 4795
Hollings College. clothing design and technology 6974
Hong Kong Polytechnic. clothing technology course activity and other programs available 6423
integrated product education in German textile education 3193
introductory course to textiles and textile technology 7258
Karl Mayer offers training course in warp knitting 5061
M. M. Bryan new president of Textile Education Foundation 8950
management roles in integration of the automated manufacturing environment 7889
NCSU's new textile facility for research and education 7257
need for technical professionals expressed at ARC in Atlanta 8759
Poland, Lodz. history of industry, schools and research institutions 1550
Poland. academic and research center. rebuilding the industry after [World War II] 1592
Romania 5598
slashing. Textile Slashing Short Course Proceedings. [1986], from Auburn University 2553
tapestries. ten year retrospective of Annie Woywod's students. Museum Schools Rheydt 4636
technical journals for companies to remain competitive 8974
Textile Clothing Technology Center (TC)2. research, education facility needs more support from apparel manufacturers 4507
Textile Education for Contract Specifiers. product liability. New York State code 7251
textile skills in creating marionettes and their costumes 3770
United Kingdom. assimilating textile design school graduates into industry 1594
United Kingdom. textile design education and industry 1593
use of video display terminals. education campaign mounted by ILGWU 8848
West Germany. ornamental textile industry. education for specialists 2613

TEXTILE INDUSTRY (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL INDUSTRY, CARPET INDUSTRY, COSTS, DIRECTORIES, HISTORY, HOSIERY INDUSTRY, INFORMATION, KNITTING INDUSTRY, LEGISLATION, MANAGEMENT, METRICATION, TEXTILE MILLS, TEXTILE TRADE, WEAVING INDUSTRY, WOOL INDUSTRY)

A. J. McNutty of Warwick Dyeing receives Harold C. Chapin Award 8932
Acrylic Council, Rabinowitz named director, promotional and educational goals 6487
Alabama Textile Manufacturers Association elects new president, Bernard R. Wedge. other officers 7211
ambient ionization in spinning and weaving sheds. effect on sanitation 5553
apparel. costs. disadvantages of intense competition for labor in ready-to-wear 3683
applications in Pakistan. blending, spinning 8947
Association of Women in Apparel Resources speaks out against low quality domestic products and inflexible manufacturers 798
ATMI annual meeting. speakers predict textile industry importance [in 1990's]. future industry goals 3071
ATMI economist makes grim predictions. hope lies in Textile and Apparel Trade Act [1987] awaiting House approval 5475
ATMI urges members toward Quick Response to keep United States textile industry on top of global textile scene 3998
ATMI's semiannual report on textile production, somber outlook 6393
ATMI, Daniel K. Frierson elected president. his background, and other officials 4791
Australia. overseas sourcing reduced. increased demand on local mills 3870
Australian textile industry, energy as controllable cost 3928
Bangladesh. [1987] production figures, [1988] expectations 8956
bar coding and electronic data interchange systems. standards. textile executives discuss advantages 3078
BASF Fibers Division's commitment to rayon, research and development 696
bibliographic source information. Textile Technology Digest and World Textile Abstracts 8969
Brazil. international expansion markets 3158
British textile manufacturers invest in dyeing equipment for quicker reaction times to trends 5231
Buyer's Guide to manufacturers, suppliers, products, services 8975
Canada Textile Society. fifty years of change 8928
Canada/United States free trade agreement. study on effect on Canadian productivity and employment 2341
Canadian Textile Journal's textile manufacturing product directory 8927
cancer victims who worked in dye houses. compensation. program to rid workplace of cancer causing chemicals 1539
capital, growth and succession problems in textile industries 7118
carpet manufacturers, top twenty-five. United States 5436
Census Bureau data survey thwarted by President Reagan. textile committee crippled 7228
Census Bureau's Current Industrial Reports. increased domestic consumption of fine wool, cotton yarns and fabrics 3242
changes in markets, products. influence of modern textile technology 7861
chemical exposure. Permissible Exposure Limit Project in United States 6335
China. recent increase in manmade fiber production, distribution, and growth profiles 4055
China. silk production, technology reforms and breakthroughs 4989
China. [1986] industry profile 1549
Chinese manmade fiber industry, production facilities and goals 4850
Chinese. six new policies being considered to improve the manufacturing and marketing of textiles and apparel 3154
CIM in textile manufacturing. topics of the First Reutlingen Textile Management Colloquium 3908
communication standards for computerized equipment from the Textile and Apparel Machinery Modernization Foundation 6361
computer applications to link industry segments 3127
computer integrated manufacturing standards called for at Textile and Apparel Machinery Modernization Foundation 6358
Consortium for Research in Apparel, Fiber, and Textile Manufacturing. goals and funding 7950

converting industry, profile [1987] and expectations [1988] 1174
cost efficiency. savings on raw materials for greater profits 7112
cotton. USDA's program to improve cotton for industry. fiber measurement, quality, strength 3220
Crafted with Pride in U.S.A. Council's message at retail level and campaign with Miss America, new commercials 3194
D. Brookstein of Albany International Research receives Fiber Society Award 8933
data processing system. CIM applications in textile and apparel industries. conference highlights 6353
design, nature and function. business, technology, human interactions 1499
developing countries threatened by high tech, automated industries of developed countries 6409
dollar, influence of drop on foreign textile trade. United States tax laws, foreign interest in retailing 2377
DSM's Stanyl plant for production of polyamide 46 engineering plastic 2474
dye, additive economy in Hungarian industry 4429
dyeing clothing. cost and quality comparisons. forecast for [1990] 6105
dyes. studies on new reactive, direct, azotic, gray, vat, changes in dyes, dyeing industry 4464
E. Stucchi. history [1860–1987] 5562
East German studies on computer aided manufacturing in industry 3923
East German study on computer workstation working conditions in the textile industry 3924
Eastern Europe, current activities 3999
education assessed by Columbia University 7263
EEC and principal industrialized nations, evolution of textile industry. outlooks 5567
EEC directives concerning methods of analysis for textiles 7977
EEC. developments and trends 7234
effluent neutralization using flue gas 5556
Egyptian textile industry, profile. growth and prospects 2335
Elisha named Textile Leader of Year [1988] by South Carolina Textile Manufacturers Association 7212
employee motivation, feedback, and involvement in planning 3892
energy conservation, flow chart value analysis 3900
energy conservation, investment. new processes developed by AFME 7181
environmental auditing practices 3143
Ernst and Whinney survey of Quick Response implementation, benefits 7101
Europe, Italy. ITMA [1987] highlights 1532
Europe. European Community policy on aid to the industry 2331
Europe. home furnishings. growth due to chemical fibers 6259
European Community 2336
European market provides opportunities for nonwovens companies 4988
European Single Act and impact on EEC textile industry 3971
export market for United States decorative fabrics 1574
Fabric and Suppliers Linkage Council's adoption of voluntary standards 1554
Fairchild's [1987] textile and apparel financial directory 1555
family businesses. conflicts of interest. problems with industry 3072
FASLINC standards for product labeling and identification. Quick Response (Conf. Paper) 8925
FASLINC standards for product requirements between textile manufacturers and suppliers. workshops on Electronic Data Interchange 6395
FASLINC standards for textile manufacturers, newly elected board members 6394
FASLINC's guidelines to use computers for product demand forecasts and information on quality 7216
Federal Trade Commission, new rules for wool, fur, and textile labels 7229
fiber, textile production, consumption, and trade statistics on USSR, Eastern Europe (books) 7931
filament fibers in Poland, natural and manmade, trends toward natural fibers 4002
financial directory of United States textile, apparel companies 8922
fine knit production. various methods and machinery used 5922
flax. Soviet Union largest producer, while Belgium commands highest prices 3229
forecast of industry trends [to year 2000]. raw materials, purchasing, production techniques 2395
forecasts [1988] textile economy 1559
Fourth Textile–Apparel Dialog forum for problems between textile and apparel industries 3986
France. textile machinery industry 3149
Free Trade Agreement with Canada, what it means for United States textile businesses 7951
free trade between Canada and United States. Dominion Textile supports 3978
French registration of textile creations. needs and practices 6422
future [1990's] outlook of cotton, synthetic, wool, luxury fibers 699
Georgia Textile Manufacturing Association. C. Robert Koon elected new president 5597
Gerber Garment Technology, Joseph Gerber profile 2834
German dyeing industry. prognosis for the future 3195
GID. [1986] yearbook, growth and function, specialized productions 6330
global textile cost comparisons, viability of textile manufacture in high labor cost areas 3153
global. future prospects based on current and projected data 5599
gray goods market [second week December 1987], United States–Soviet textile pact. imports of Russian sheetings 1092
Great Britain current status and changes over past decade 2272
Great Britain, relation to international textile trade 2334
Great Britain. trends over past twenty years and management strategies to deal with trends 2271
handling of stock. three step time saving system. elimination, simplification and mechanization 7130
Harold Ingram's new dyehouse, Quick Response capacity 2756
heat recovery systems. performance review and assessment. reducing energy costs 7895
history, evolution of fiber formation in 20th century (Conf. Paper) 8963
Hoechst Celanese's Computer Assisted Partnership Support system. mill access to company data banks 3119
home furnishing textiles, United States. industry production, trade statistics 8929
home textiles market [1987] reviewed. towel trade, cotton in home textiles, business by mill-merged companies 1175
HSS systems by Val Lesina. gaining notice in Italy and abroad 5763
Hungary, new economic conservation methods, effects, structure 4697
Hungary, overall effects of material conservation 4702
Hungary. MTM method for calculation of production times and manufacturing costs 2273
Hungary. textile industry [1975–1986], past and recommended changes 697
importing practices. AAMA chairman blasts domestic textile industry for shortages in cotton yarn and yarn dyed fabrics 4776
incontinence products, marketing for textile rental industry 5443
INDA nonwovens handbook on products, manufacture, growth of industry 7971
India's weak industrial policy fails to upgrade old units 7225
India, economic profile, textile industry review 8949
India, Surat, history and present situation. investments, sales revenue increases, profitability, economics 7857
India. conference covering recent trends and developments in textiles 7259
India. history and current state of mill, power loom, and hand loom sectors 6405
India. process and machine modification to conserve electricity and steam 1521
India. productivity. labor and machine. problems and prospects 5489
India. small acrylic fiber-based projects for developing rural economy 7213

Indian handloom sector. Tara loom for increased productivity 2575
Indian jute industry analysis, problems, improvement 2428
industrialization [1960's to 1970's]. developed and developing countries 7239
innovation in textile technology 7266
innovations in dyes in last twenty years. trends, changes 4465
integrated information system to improve competitiveness of textile industry 3875
interior textiles industry [1988] annual industry directory 8650
International Technology Award for Clothing technicians 564
interview with Daniel K. Frierson, incoming president of ATMI 3196
introductory course to textiles and textile technology 7258
investment in weaving mills. questions to guide in calculating 3406
Ireland. optimistic outlook. future prospects for various industry sectors 7858
Italian intimate apparel. new growth and change. consumer attitudes 7723
Italian textile industry, profile 7230
Italian textile mills' capital spending plans [1988]. problems due to higher prices and sagging export market 2254
Italy. major trends. financial data. growth 8934
Item 807 trade. Special Regime, new textile agreement between United States and Mexico 5579
ITMA [1987]. continued report on textile machinery and equipment 6328
ITMA [1987]. post show reactions from successful exhibitors 1553
Japan and competitive strategies. high-tech products with high added-on value 7104
Japan. current industry situation. increased production. exports. production control 7877
Japan. lack of need for standardized Quick Response 8825
Japan. special finishing agents and processes. trend in finishing mills toward short cycle production capacity 2787
Japanese. Quick Response production and expert systems 8826
Just in Time strategy for improvement of industrial investment 7110
knitted fabrics. gaps in information given by manufacturers at Techtextil 267
knitting industry. British. problems and solutions for the future 3405
Knitting International profiles various countries with emphasis on knitting 7260
knitting. Quick Response's effect on management costs 3886
Korea and its export trade 5575
Kuris and Assyst. collaboration to improve products and equipment 6334
Kurt Salmon Associates' Textile Profile of United States public textile companies 6406
labor costs compared between several countries 2274
labor education, improvement necessary for United States to remain productive, competitive 4785
labor. status in Third World and industrialized nations 5600
Lake Como. studies of effect of industrialization on the lake's ecosystem. chemical make up and fish population 7196
Latin America [1988/1989] directories. products, suppliers, sales representatives 7245
law suit between Du Pont and Akzo over aramid fiber patent settled. details remain undisclosed 5649
licensing support suppliers directory 5345
licensing. legal issues. protecting properties. conducting clearance searches, negotiating contract agreements 5344
linen industry profile. structure. growth. markets 8228
liquid heater for hot baths. role of steam 6080
M-MF Producers changed name to American Fiber Manufacturers. new chairman heads association 8962
M. M. Bryan new president of Textile Education Foundation 8950
macromolecular chemistry, affect on textile industry, development of polymers 4065
major changes in last twenty years 3197
major developments, EC focus. factors in development of world's textile markets in late [1990's] 6410
Malaysia. prospects for international expansion 3170
management information systems from different companies for apparel and textile industries 3913
management. balance between long range planning and short term goals makes for high productivity and product quality 3890
manmade fiber executives look forward to a strong year 4855
manmade fibers and prospects for the year [2000]. production shifts to developing countries 6411
manufacturing and marketing patterns [1980-2000]. history and predictions 5581
manufacturing. Teflon finishes, properties, importance 4822
market, international structural changes 8784
Mauritius. industry status and growth 3150
men's wear, United States. industry production, trade statistics 8920
mergers and acquisitions in textile industry since [1986]. profile 7124
Mexico. restructuring program for competitive stance in world market 8951
mill earnings [last quarter 1987] declined. analysts expect [1988] improvement 3109
mill productivity versus flexibility 8827
modular manufacturing, paper by Mike Brent given to American Apparel Manufacturers Association summarized 3895
natural dyes. suitability of industrial dyestuffs and alternative to synthetics 6912
NCSU's textile complex for research and education 7257
need for new model of quality achievement based on specialized goals 7169
nonwovens industries in EEC. fiber usage patterns. polypropylene popular 8230
nonwovens industry review, international. companies, market share, products, trends 1875
nonwovens industry. challenges and opportunities resulting from European Community integration process 4987
nonwovens. directions for the industry and its future 5822
nonwovens. ITMA [1987]. new techniques. collaboration in industry 6050
NTA selects [1988-1989] Board of Directors 8952
nylon 6 and nylon 66 developments. world market outlook 6529
Pakistan polyester fiber industry 8944
Pakistan. evaluating and improving productivity 5484
patent laws, French, problems. financial incentives for inventors 7253
patent laws. problems, enforcement 7254
People's Republic of China, textile history and current goals 6424
People's Republic of China. overview 7261
People's Republic of China. prospects for growth 7262
People's Republic of China. significant growth predicted 8953
PMTS motion/time systems for sewing industry. Peter Evans' CME 5385
Poland, Lodz. history of industry, schools and research institutions 1550
Polish. flax, economical analysis 4007
Portuguese. massive slowdown in exports as economy moves in line with EEC policies 8954
prices for People's Republic of China silk apparel, fabrics increase 7946
printing industry developments, [1984-1987] worldwide survey 1953
printing, world trends 5287
production speeds in textile production to increase. Paul Wiercks of Werner International. technology seen at ITMA [1987] 4796
productivity performance and innovation. decline in United States industrial output (Book) 8923
Protti. brief history of firm and description of knitting machinery 5924
quality assurance throughout manufacturing process 7044
quality control based on shared information with apparel industry 6235
quality control, importance. initiatives taken in French industry 6390
quality management. importance of quality. needs and misconceptions 7123
quality. Sprint improvement initiative. application of Pecci 5486
Quick Response combined with partnerships to produce

competitive industries in textiles, apparel, and retail 698
Quick Response for United States textile industry. ATMI annual meeting 4000
Quick Response in the textile industry, pros and cons. equipment 7144
Quick Response technology. United States industry implementation 7114
Quick Response, status reviewed by Kurt Salmon Associates 1476
rayon acetate production threatened. polyester possible substitute 4051
replacement rate, TRSA's annual textile life survey, comparative data to examine replacement costs. use of ratios 6396
report on world trade in textiles and apparel released by FFACT. United States and need for realistic policy 4775
restructuring. affects on cost of textured polyester filament 8749
Retail Competition Enforcement Act, reversing Monsanto versus Spray Rite decision 2244
Rhone-Poulenc fiber activities 2404
role of trade representative as disseminator of information between commercial and industrial concerns 3979
Romania 5598
SAFLINC passes EDI voluntary standard. more apparel industry participation needed 6407
Scotland, textile industry survey, company profiles, products 3151
Scott elected president of ATMA along with new first and second vice presidents and treasurer. officers' background 5568
Scottish textile industry revival, new investments, diversification 1595
selections from International Conference on World Textiles [into 1990's] 3152
Senator Hollings blasts trade representative Yeutter for criticizing textile quota bill 7235
sewing machinery. mergers and acquisitions in the industrial sewing machine market 7695
sheets, Albert Sardelli of Wamsutta Pacific, director of creative services. interview 3025
Soft Goods Outlook [1988], Kurt Salmon Associates' less profitable year ahead for textile industry 1556
South Korea. Cotton Plus concept uses imported dyes to satisfy the changing needs of its customers 7947
South Korea. present status and future prospects 7933
South Korean textile and clothing industry. main industry features, major fiber and textile companies 2337
southern United States textile industry, historical perspective 7969
spinning machinery. comparative analysis. economic and technical 2512
Spinning [2000] report from Battelle Geneva Research Center 5760
spinning, short staple. forecasts for the year [2000] 5777
spinning. trend toward conventional techniques 5753
Springs Industries plant technology modernization program 8935
standards adopted by Textile Apparel Linkage Council. distribution and transportation, shipping label, packing guides 1591
standards from Textile/Apparel Linkage Council. industry participation 504
statistics on synthetic fiber and yarn production and trade in India 7975
Stripling, new president of South Carolina Textile Manufacturers Association 7214
Sundries and Apparel Findings Linkage Council meeting with Textile/Apparel Linkage Council to vote on voluntary industry standards 799
Switzerland and its successful textile industry and textile machinery industry 4747
synthetic and natural fibers compared. future prospects. world-wide situation applications, demands 1601
TALC. creating voluntary standards. Electronic Data Interchange and Quick Response 795
Teijin. history, product line, research, and management 4854
testing, textile. overview of its roles and importance 6345
Texas Tech University's Textile Research Center changing name to International Center for Textile Research and Development 4703
Textile and Apparel Machinery Modernization Foundation (TAMMF). formed to create standards for factory computer communications 3990
Textile and Apparel Machinery Modernization Foundation, initial project computer communications 1557
textile industry future factories. computers controlling production 3918
Textile Institute's [1988] Annual World Conference. review of some papers presented 7964
Textile Society of Canada. fifty years of Canadian textile industry changes 8928
Textile Trade Bill. HR 1154. import legislation demand. interview with Carlos Moore, vice president of ATMI 2350
Textilimpex of Poland profiled. imports and exports, machinery 1469
textured yarns. achievement of balance between supply and demand in the last two years 8788
Tootal, United Kingdom textile group. structure, corporate strategy, products, prospects 2338
trade apparel. tariff and trade classification. Harmonized Commodity Code for United States 7953
Tuntex's plans for major polyester raw materials project in Thailand 10
Turkey's textile industry. role in economy. government role, exports and imports 3972
United Kingdom and Courtaulds. market oriented strategies replace production oriented strategies 3101
United Kingdom textile cycle. model 2296
United Kingdom. analysis of manufacturing capacity 7172
United Kingdom. assimilating textile design school graduates into industry 1594
United Kingdom. factors influencing competitiveness 6340
United Kingdom. industry and textile design education 1593
United Merchants and Manufacturers closes Clearwater, South Carolina, finishing plant 3108
United States and European textile industries. [1986] rankings, mergers and acquisitions 3871
United States clothing consumption. effect of economy. process 5566
United States Commerce Department's [1988] industrial outlook for textile and apparel industries 2339
United States Custom Services' interpretation of item 807 regulations challenged by textile and apparel manufacturers 6414
United States economy and growth in manufacturing. address by Dean of Clemson University School of Commerce 1558
United States gray goods market for mid-January 1173
United States manufacturers. duty-free concessions on domestic components of foreign products [section 807] 3166
United States patents need strengthening to protect nonwoven innovations 6404
United States textile industry [1988] performance predicted. imports, consumer 2357
United States textile industry. energy consumption and potentials for conservation 7180
United States textile mills warned of economic downturn 6408
United States to be introduced to Dornier air-jet looms 8930
United States [1987] mill consumption, imports and exports, domestic consumption of natural and manmade fiber 3201
United States, Canada. Canadian Free Trade Agreement. opposition 3163
United States. carpet manufacturers, second top twenty-five 5435
United States. fibers, textiles and apparel industry. history. changes. policy options 7859
United States. fiscal [1986] performance for thirty-five public textile corporations. sharp recovery examined 1470
United States. transformation of industries, effects of policy decisions 7948
Value Analysis/Value Engineering. alternative products and materials 1471
value engineering studies in Europe. application of techniques 1472
VanDernoot named president of Polypropylene Council of America

7210
vertical market improvements and Du Pont's sixth Annual Industry Forum 8924
voluntary Inter-Industry Communications Standards formed to facilitate product information 796
warp knit fabrics. range of industrial uses 5911
waste recycling. achievements and challenges facing the industry 758
weakened sales force knitting machinery manufacturers to expand sales areas 5821
weaving. measurements of efficiency for evaluation of costs 6366
West German textile industries and new air quality requirements 3947
West German's textile trade policy, current market 7238
West Germany's machinery export business in Latin America 4774
West Germany. analysis [1987]. downturn in apparel, dyeing, finishing industries 3976
West Germany. role of manmade fiber industry. fiber production figures. foreign trade trends 7330
Western Europe, current activities 3312
Western Europe 3973
Wool Record buyers' guide to suppliers and manufacturers 2440
worker safety standards from the United States Labor Department. worker exposure to chemicals used in textile/apparel industries 5551
working conditions in sample of Third World and industrialized nations 5487
world production capabilities [1986]. ITMF Report 6412
world textile trade and production trends 8955
world trade. [1980-1986] general growth trend and some change in distribution patterns 5584
worldwide consumption of cotton, wool, manmade, cellulose fibers since [1960] 4001
worldwide growth in recent years 7105
worldwide textile consumption forecasts. factors influencing. productivity 2238
yarn and thread used in knitwear and hosiery [1987]. results synthesized by the Textile Matrix 7862
Yugoslavia. current, projected polyacrylonitrile production capacity 7949

TEXTILE INDUSTRY SUPPLIERS, SEE UNDER SPECIFIC SUBJECT HEADINGS, SUCH AS DYES, DYEING ASSISTANTS, KNITTING MACHINERY, MANMADE FIBERS, TEXTILE CHEMICALS.

TEXTILE MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS AUTOMATION, CLEANING OF MACHINERY, DRIVES, ELECTRICAL EQUIPMENT, FLOCKING MACHINERY, INDUSTRIAL HEALTH AND SAFETY, MAINTENANCE, METAL DETECTORS, NOISE, POWER CONSUMPTION, TEXTILE MILLS, AND UNDER SUBJECT HEADINGS OF SPECIFIC PROCESSES)
accessories and auxiliary equipment for knitting industry at [1987] ITMA 3942
air entanglement machine from Gilbos N.V. computer control with independent steering for each spindle 3371
air nozzles implemented at Jaymar-Ruby sewing plant. lowered noise level and cost improvements in downtime 1537
air washer. heat and mass transfer 735
aluminum coating of polyethylene terephthalate fabrics, production 5318
apparel manufacturing equipment. advantages of leasing 7666
Apparel Technology Center. advanced apparel technology evaluation and demonstration 5349
appraisal of sized yarn behavior in fabrics with Reutlingen Webtester 4681
apron top tensor type E design, top roller type WRC-849 741
ATI directory for United States and Canadian textile machinery industries 7968
ATMA. Scott elected president. backgrounds of all new officers 5568
ATME-I [1988] space sold out. weaving, knitting, dyeing, printing, and finishing machinery 5536
ATME-I [1989], part of Foreign Buyer Program 6391
ATME-I. fabric forming, printing, dyeing, and finishing machines 8844
Austria. textile machinery industry and its high quality, high specialization 4742
automated control, testing, computers in cotton industry in USSR 5522
automated systems from Ivanovo SKB SM, abilities 5523
automatic feeding system for cutting lines. Ateliers 8843
automatic transfer line developed by TC2 other center projects, machinery builders 4729
automation advances from Mahlo, Schlafhorst, Kannegiesser 7894
automation in Soviet knitting industry. areas and goals 5063
automation, industry executives share their views 5510
ball bearings on two beam looms, reduced tension unevenness, vibration, defects 4193
Bonas, Mueller and Mageloa elastic fabric looms 5094
bonding. Hi-Tech thermal from Fleissner for nonwoven webs 3494
Brazil, knit fabric industry 5044
Britain. advances in technology. computer aided patterning system, jacquard from Bonas, others 3940
British dyers and finishers directory (Book) 8921
British revamped patent regulations, effect on United States machinery makers 1530
British textile companies and their [1988] spending plans 1480
Brother BAS 600 for single or double piped pockets. operation and description 6988
Buyers' Guide for machinery manufactured in Federal Republic of Germany and West Berlin 3941
buyers' guide to textile and apparel manufacturing machinery 6221
card comber cylinder and fly comb. reduction of inertia action in control of fly comb 6565
carding machines. Aerofeed U. developments. history from [1962] to present 3401
CBN grinding wheels dressed 7896
CBN grinding wheels 6373
circular machines for knitted yard goods. new developments in field 6703
coating textile machinery components to increase abrasion resistance, durability 4748
colors for textile machinery. [1987] ITMA 6369
complete manufacturing lines by Asselin seen at ITMA. nonwovens production 742
compressed air. cleaning 2312
computerized textile equipment. developments 727
Conticon process automation system for jiggers manufactured by Kuesters 8444
continuous dyeing problems. dyes, processes, materials and machinery 3616
cooperation between textile mills, machinery factories to improve textile machinery 4710
Cosmos IV singeing machine from Hill-Lupton. twin flame system 5186
Courtaulds Spinning's new Bolton open end spinning mill. plant equipment and production rate 2519
cyclic diagram calculation, shed formation, heddle action 4204
developments. doffing device, nonwovens line, texturer and others 2313
developments. slub yarn system, dryers, dyeing machines, winding machines, packing systems 743
dobby looms. patterning versatility in number of harnesses 6650
dye bath exhaustion control. machinery from ITF-Nord 6118
dyeing. Colorcombi from Proll and Lohmann combines drum, packing, and paddle processes 3610
East European developments 7897
European Committee of Textile Machinery Manufacturers production and marketing activities 2308
evaluation by Soviet experts of domestic and foreign loom and weaving preparation machinery 4187
Exhibitions, international 2390

fabric spreading equipment from Gerber for total automation of cutting room 2840
finishing machinery at Klopman's plants in Frosinone 5538
finishing. advanced machinery hoped to boost United Kingdom industry 3561
Fintessile shedding machines with electronic control and programming systems. advantages and performance 7408
Fleissner machinery for manmade fiber production 6508
France. textile machinery industry 3149
French manufacturers. developments. predictions for a strong future 3550
French textile machinery manufacturers. sales, export market, products 7185
full fashioned articles on flat knitting machines. possible solutions to problems 8321
G-Mex Textile and Technology exhibition in Manchester. highlights. post-ITMA developments 4744
G-Mex Textile and Technology exhibition. chemicals, equipment. dyeing, printing, finishing 4743
garment transport conveyor at Belgian textile plant yields more sanitary products 8845
geometric design of drive gear between two spindles 5527
Georgia and Alabama mills, limited effect of technology at ITMA on capital spending plans 1484
German textile machinery, exports to United States 7186
Groz Beckert needles. developments for nonwovens 4274
Healy Bearing specializes in wire race bearings 4745
hosiery. recent developments and innovations in the field. tables 7429
humidification and heat loads 7190
Hungarian conservation methods, energy, materials, with new machinery 4746
hydraulic unwinder for films and nonwovens from Christian Maier. automatic splicing 7900
image analysis. general principles, system of Insitut Textile de France, applications of technology 3134
IMB [1988]. American exhibitors at fair 6368
impact of new Superfund Amendment and Reauthorization Act (SARA) on textile companies 3198
increasing component work life with lasers, coatings, facing 4749
India. developments in wet processing machinery. implementation 7564
International Buyers' Guide [1988-1989]. machinery, equipment, chemicals 7252
International Technology Award for Clothing technicians 564
interview between Southern Textile News and ATMA executives 3943
introductory course to textiles and textile technology 7258
iron/graphite powders to reduce machinery friction, tests, suitability 745
ITMA [1987] highlights. European and Italian textile industries 1532
ITMA [1987]. air texturing and intermingling equipment 965
ITMA [1987]. auxiliary equipment, transport, testing systems 7178
ITMA [1987]. continued report on textile machinery and equipment 6326
ITMA [1987]. detailed survey 5593
ITMA [1987]. directory of exhibitors 2307
ITMA [1987]. dyeing and finishing equipment. trends 1897
ITMA [1987]. dyeing, finishing, and printing machinery. computers and automation 3557
ITMA [1987]. dyeing, vacuum dyeing, finishing, and printing machinery 2314
ITMA [1987]. exhibitors in weaving and control apparatus 6420
ITMA [1987]. finishing. automation, dyeing machines for knitted fabrics, process controllers 3562
ITMA [1987]. firm by firm guide to textile machinery innovations 1552
ITMA [1987]. flat knitting machinery. overview of innovations 6681
ITMA [1987]. French textile companies. capital spending plans. investment programs 1483
ITMA [1987]. French textile weavers' impressions of machinery. recent purchases 2590
ITMA [1987]. general review of machinery and manufacturers 1523
ITMA [1987]. general review 1467
ITMA [1987]. important displays 7250
ITMA [1987]. innovations in wet processing machinery. application of process control 6821
ITMA [1987]. machinery and techniques for knitted piece goods, hosiery and outerwear 7426
ITMA [1987]. machinery highlights 2237
ITMA [1987]. machinery review, developments 1531
ITMA [1987]. machines by Autefa 3186
ITMA [1987]. major Swiss manufacturers interviewed 7249
ITMA [1987]. medical textiles sector. highlights 2549
ITMA [1987]. North Carolina and Virginia mills. technology, limited effect on capital spending plans 1534
ITMA [1987]. post show reactions from successful exhibitors 1553
ITMA [1987]. preview. technical information 7898
ITMA [1987]. production speeds in textile production to increase. Paul Wiercks of Werner International 4796
ITMA [1987]. robotics for carpet yarn spinning 2514
ITMA [1987]. South Carolina mills, limited effect of technology on capital spending plans 1535
ITMA [1987]. specialized knitting machinery. materials used and end products 6679
ITMA [1987]. survey of exhibits and manufacturers 4797
ITMA [1987]. Swiss manufacturers. developments 3402
ITMA [1987]. Textile World's special report 2389
ITMA [1987]. Textile World's survey of important new products introduced 2304
ITMA [1987]. wet processing developments. computerized process control 7565
ITMA [1987]. woolen carding. terry looms, sample of more innovative exhibits 3187
ITMA [1987]. yarn manufacturing, synthetic fiber 900
ITMA [1987]. yarn processing exhibits 940
ITMA [1991]. likely developments 1473
ITMA, assessment of machinery shown by Auburn University textile engineering professors 1533
ITMA. flexibility of production machinery. substitution of automated linkages 3116
ITMA. what investors want from manufacturers 7264
ITMF survey of world demand for textile machinery 6374
jacquard and dobby reliability tests, requirements 4195
Japan. current industry situation. increased production. exports. production control 7877
JIAM textile industrial and apparel machinery exhibition in Osaka 2394
JIAM [1987] in Osaka. shirt finishing machinery. garment assembly technology 2393
JIAM [1987]. Techtextil 2. exhibition highlights 7899
Just in Time strategy. balance of investment in machines and personnel 7110
Klopman International modernizes workwear operations in Italy 1187
Klopman's new ARTOS plants. summary 6362
knitting full fashioned knitwear on flat machines. Shima SET-092 FF 5943
knitting machinery, flat. MC-613 from Universal 3478
knitting machines, circular. various applications 5934
knitting machines, CMS flat from Stoll, for three dimensional knitting 3476
knitting, circular. ELHA from Lucas. electronic controls 3474
knitting, single needle. 100 KA S from Kettma 3473
knitting. APM 8 TE/3 machine. triple feed rectilinear for full fashioned goods and intarsia 5944
knitting. Model SYX-3 single jersey machines from Jumberca. counter-movement knitting technology 3475
knitting. Variatex TEJ by Mecmor, 180 series 5920
lack of foreign oil and lubricating products. replacement with domestic types 4750
laminar air distribution equipment, improved filtration, circulation, energy conservation 4739
laundering equipment for stone and acid washing 1266

looms, projectile. for wide sheeting, installed at Bibb 8835
looms. inside conjugate cam shedding mechanism. analysis and design 201
low linear density open end knitting yarn, production lines in East Germany, Poland and Czechoslovakia 4098
LT-2000 nonwoven production line and use of wastes 4275
lubricants and branded oils for. TEXTOL 265
machinery design. Czech Industrial Design Center 7901
Marchisio single knit machine for maximum convertibility in jersey 6698
measuring instruments, function in dyeing and finishing 6822
Mecmor Variatex TEJ. new 180 TEJ version. width variation 5928
mercerizing machines and their operations reviewed 7572
mercerizing machines, chainless and padless-chainless 6837
Meridiana by Santoni for socks. latest disc-cylinder model. capabilities 6685
metering fluids for continuous and batch processing 3944
modernization. Springs Industries textile, physical plant 8935
modification to reduce consumption of electricity and steam in Indian textile industry 1521
modifications needed for energy conservation 1519
multiphase circular knitting machine by Vilargunte. design for the future 7461
museum, Rheinish Industrial is former cotton spinning mill. showing [1837] industrial plant and life of workers 4779
NCI loom for novelty items by Scheller 5918
Notio Maskiner's modular carpet backing unrolling system 2300
novelty, air jet double vortex method, machinery 4963
oil, lubricant. analysis program for diesel engine maintenance 7173
packaging machinery for woven fabric for finishing 737
Picanol GTM rapier loom with PSO weft yarn breakage elimination 6655
pin arrangement from H. Schirp in tearing cylinder to cut down fiber waste during opening. recycling 3326
polymer materials. components and effects of substitution for natural materials 4751
processing equipment for mats. decrease in number of suppliers 3745
production forecast. Financial Times Conference, paper 2238
Quick Response. direct linkages within textile, apparel, and retail complex through machinery 739
radionuclide measurement of knitting machine component wear 3863
Readywear buyer's guide, international manufacturers 2386
reduction in textile machinery for safety requirements 4759
replacement rate, TRSA's annual textile life survey, comparative data to examine replacement costs. use of ratios 6396
Rieter's Drawframe RSB 51 draw-texturing machine. United States production 5802
ring versus rotor spinning. cost comparison 5776
rollers and roller coatings for the textile industry 4752
rollers. simulation of abrasion, deformation, rigidity, strength, torsion, tension 4711
Sabamatex, overview (Trade Lit.) 8642
Schlumberger & Cie. company history 8787
screen steamer type ZZ-4/260-1, for filament yarn fabrics and dye fixation 5334
sinkers for a variety of knitting machines by Kern Liebers. range of product. design technology 6696
SJM-3 by Jumberca for wide range of patterns 5932
SKF. individual motor drive system. bottom apron cradle and stop motion 5737
sock boarding machine, TF-96 from Firsan 3722
Somet company profile. Master SM 93 rapier loom 5877
Somet company. rapier looms 5878
Soviet nonwoven machinery and inefficiency compared to European counterparts 4277
Spanish machinery review. crochet, trimmings, raising, dyeing, printing, medical textiles 1536
Spanish. imports and exports. statistical comparison [1983-1986] data 3147
spinning and weaving machinery. [1987] shipments survey. world market highlights 8841
Starfish measurement system for knit fabrics. origins 5916
steaming and shrinking. One Yarn Spirovap from Superba 3383
Sulzer. interview with President Fahrni 7113
super-finish ball bearings 6375
super-finishing metal. cutting process 7902
Superba Yarn Tester. automatic control device 5786
Swiss textile machinery developments. high praise from experts 5537
Swiss textile machinery manufacturers in the United States, closer relations, strategies and products 6805
Swiss textile machinery, United States demand and how Swiss are coping. popular and new products 7187
Swiss. use of modern materials and technology. flexible manufacturing systems 7175
Switchtrack Rail System installed by C & B Trimming. unit production system, company history 4561
Switzerland and its successful textile industry and textile machinery industry 4747
technical advances and their impact on industrial nations 2315
technology for new levels of flexibility, stand-up workstations. international manufacturing 5539
Textile and Apparel Machinery Modernization Foundation (TAMMF). formed to create standards for factory computer communications 3990
Textile and Technology Exhibition, Manchester, February [1988]. preview 1589
Textile and Technology Exhibition. Manchester, England 4789
Textile World Buyer's Guide to worldwide manufacturers and suppliers of textile machinery, equipment, supplies, services 7188
Truetzschler. manufacturer of machinery for preparatory plants 8750
Twenty-first New Technology for the Apparel Industry exhibition in East Germany 3989
twisters, Saurer-Allma's ESP spin twister for novelty yarns. utilizes sliver spun and filament yarns 3363
VEB Kombinat Textima, textile machinery. drawing, spinning, knitting models 7189
vertical versus horizontal dyeing and drying installations 3866
vibration measurement. applications as practical maintenance regimen 7903
vibration measurement. prediction of machine maintenance requirements 3938
VTM-50 flexible, plastic air suction hoses for textile machinery 740
warping, sectional, Benninger Supertronic. measures warp ends and tension 3420
waste processing in Soviet mills. modernization of inferior machinery 4807
weaving and spinning equipment using rotary screw compressors. advances, advantages 5540
weaving. geometric principles of machinery 4158
West Germany's machinery export business in Latin America 4774
WestPoint Pepperell's acquisition of J.P. Stevens. split-up of various divisions and stock to different Corporations 4798
Wilmark, sales and marketing company for textile machinery and auxiliary parts 3069
winder from James Mackie and Sons for monofilaments 3426
wool yarn steamer installed in the automated transportation system 487
world textile trade and production trends by country 2384
ZSK-Stickmaschinen Gesellschaft. machine control systems 540

TEXTILE MARKETING, SEE MARKETING.

TEXTILE MILLS (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL MANUFACTURING PLANTS, KNITTING AND HOSIERY MILLS, MILL BUILDINGS)
accidents, fire and chemical. prevention and fighting concept from Sandoz 5494
accidents, fire and chemical. prevention and fighting 5493
ACHEMA [1988]. plant design and machinery for manmade fiber

production 8747
acquisition of WestPoint Pepperell by J.P. Stevens. split of stock and divisions among companies 4798
Adams-Millis acquired by Millis family 6338
agreement between Greenwood Mills and Permna Color Corporation, merger 3889
air conditioning. cell type air washer 7184
air velocity levels in textile mills. humidification survey by SITRA 3936
Akzo Fibers, financial profile [1987]. provisions, plans for future 7227
Allied Fibers expands industrial polyester capacity 807
American Carpet Mills formed 7029
American Polycraft, polypropylene BCF yarn producer, profiled 808
application of flex time in textile mills 4730
Avtex Fibers rayon, synthetic fiber producer closing 8790
Avtex Fibers. no profits threaten closure 8785
BASF's commitment to rayon fiber operations reaffirmed at press conference 3901
Beacon Manufacturing, blanket manufacturer profile 2201
Bibb Company, acquisition of J. P. Stevens assets from WestPoint Pepperell 5488
BUDA-FLAX. modernization of spinning, weaving, and finishing machinery 3872
Budaflax Mill, environmental protection measures 4756
Budapest mill in Hungary. investments in new technology 8751
Burlington Holdings, sales and earnings for fiscal quarter [1988]. losses from buying Burlington Industries 3902
Burlington Industries agrees sale of Industrial Fabrics Division to Taka Corporation and Porcher Textile 3085
Burlington Industries' agreement to sell its Canadian textile operations 7866
Burlington Industries, financial outlook since buyout. management strategies 7865
Burlington sells industrial fabrics division to Takata 2248
Burlington sells Masland Auto Products Division. other assets already sold or to be sold 2249
Burlington's plans to upgrade yarn operations and phase out weaving in Caroleen plant. reasons and plan details 2247
Burlington's sale of Erwin denim plant to Dominion Textile. lawsuits dropped 710
Carisbrook Yarn. management and operational changes, products, future 7106
carpet industry. lack of computerization in mills 2173
Celanese Fibers' integration with Hoechst Celanese. consolidation of divisions, company products, facilities 2251
Celatose company profile. private label diaper manufacture 2955
ceramic. Rath's new Moenchengladbach plant 5638
chemical processing departments, viability 6663
computer integrated production planning, control, design, engineering, manufacture 4720
computer inventory control, links to customers and suppliers 5509
computer programs at Graniteville, Woodville Mills 5009
computerized information system 7153
Conquest Carpet Mills acquired by Penta Enterprises. company products, management restructuring 6331
consumer interest growing in cotton and spandex hose. how mills are coping 6403
cooperation between textile mills, machinery factories to improve textile machinery 4710
corduroy production, late ordering by retailers and effect on mills 1731
cotton dust, computer simulation 7176
Courtaulds acquires Liberty Fabrics 7107
Courtaulds North America to merge with Liberty Fabrics. details not disclosed 7125
Courtaulds Spinning's new Bolton open end spinning mill. plant equipment and production rate 2519
Courtaulds taking over Liberty Fabrics in expansion of elastomeric fabrics division 7231
Courtaulds Tencel fiber dyeing characteristics of rayon with twice the strength 5657
Courtaulds. financial status and outlook 1474
Crompton Company closes operations. company assets, reorganization under Chapter 11, selling history 6342
Dan River's niche marketing strategy, upscale designer licenses, collections 6255
Dan River's strategy to encourage industrial engineers to create change 3110
Dan River, Cone Mills, and Fieldcrest Cannon mill executives discuss loom purchases 2589
Dexter Corporation quality control program 6364
Dominion Textiles [1987] fiscal year, sales, performance, changes in management, operations and divisions 1500
downtime overlapping degree studied using theoretical equation 2297
Du Pont and Toray build joint Kevlar manufacturing plant. markets and aramid fiber applications 6495
Du Pont and Toray Industries building Kevlar plant in Japan. size, cost, production capacities 6493
Du Pont increases polyester capacity by fifteen percent 6343
Du Pont restructures Orlon division. High Trek, AccuColor products 6488
Du Pont's expansion plans for Dacron polyester fiber production, improvements 2490
Du Pont's Kevlar plant in Maydown, Ireland 5648
Du Pont's modern hosiery mill in Camden, South Carolina, investment in nylon and Silken Sheer business 3873
Du Pont's plans to modernize Dacron production, main goals 3111
Du Pont-Toray to build Kevlar manufacturing plant in Japan 6494
Dundee Mills profile. new warp knitting operations for terry towels 1791
Dundee Mills, centennial. company structure, management, products 6332
Dundee Mills. development over one hundred years of operation, corporate philosophy 3073
Elitex's installation of microcomputer control in spinning mill for BD spinners 4103
engineer programs for wool processing mills 5500
environmental auditing practices 3143
Exxon to purchase ICI's geotextile division and Terram-producing plant 6549
fiber industry executives discuss fiber outlook [1988] in the shadow of failing apparel sales 4801
filter, APF automatic panel from Luwa 6370
Fischer. polymer and manmade fiber plants 5718
Fruit of the Loom expansion of spinning capacity at Leesburg plant 2270
Glendale Spinning Mills, Ontario. reorganization by First Corporate Equity Group 3091
Hanes Hosiery. automated data collection system using IBM PC AT and IBM 4381 for payroll, time, and attendance 3118
heat recovery systems. performance review and assessment. reducing energy costs 7895
Hoechst Celanese plans for merged fiber business, three-division organization 1485
Hoechst Celanese's divestiture of some of its polyester textile fiber business to Sterling approved by Federal Trade Commission 711
humidification and heat loads 7190
Hungarian textile mill offices. Telex systems, electronic mail, interoffice communications 702
Hungarian. labor and mill organization in Budapest Knitting Mill, computers 712
Hungary's Habselyem mill. optimizing resources and machinery 8746
Hungary. computer installation in sewing, knitting mills. improved production 266
Hungary. economic program, effect of government intervention on textile prices 713
ICI Fibers in Doncaster England, quality control processes 7167
ICI selling Terram geotextiles business to Exxon Chemical 6769
India. modernization, productivity and profits. problems and prospects 5489

information processing system, integrated, for textile plant management 4704
Interior Fabrics Technologies (INTEK), manufacturer of specialty fabrics for systems manufacturers, products 3903
interview with Cotton Incorporated's J. Nicholas Hahn. company plans, cotton industry, textile industry 3075
investment in weaving mills. questions to guide in calculating 3406
J. P. Stevens buyers divide company 6397
J. P. Stevens buyout proposed by senior management group. proposal details 2255
J. P. Stevens. sales figures, proposed senior management buyout 3904
J.P. Stevens and Company, history [1813 to present]. [1986-1987] company position, divisions, facilities, sales figures 3074
James River and Holmens Bruk joint venture 3033
Japanese. lack of need for standardized Quick Response 8825
JPS Textile Group, acquisition of various J. P. Stevens divisions after buyout 6398
JPS Textiles Group created from J.P. Stevens divisions acquired after WestPoint Pepperell buyout 7106
jute mills. steam energy conservation 3933
Kanebo Spinning, Japanese joint venture, to open cotton spinning plant in Georgia 2340
Kontis C4-330 multiple shed loom in Perla Cotton Weaving Mill, abilities, computer control 4190
Kurt Salmon Associates' Textile Profile of United States public textile companies 6406
laminar air distribution equipment, improved filtration, circulation, energy conservation 4739
lighting in textile facilities. reduction in power consumption 3932
Loerrach Technical Textiles. transition to computerized operation 8802
logistics at Schiesser 8773
magnesium hydroxide, magnesium oxide and calcium carbonate recovered from wastewater 7202
maintenance program reduces costs at Du Pont fiber plants, improves service 7102
management strategies of Elastic Corporation of America 5482
material consumption reduction techniques at the Lakashtextile Concern in Hungary 209
material, energy conservation, Hungarian knitting mills, changes 4263
mergers and acquisitions in textile industry since [1986]. profile 7124
Meritas Yarns. company development, facility, equipment, products, production levels 1688
META-Regelbau's interlocking rational storage shelving concept 3945
Milliken's Every Inch Guarantee 7753
Milliken, Sommer-Allibert nonwovens joint venture 8752
modernization of dyeing process and moving to automated dye dispensing systems 5476
modernization. energy efficiency 7191
Molnlycke acquires Ancilla BV and Peaudouce, becomes leader in European personal hygiene market 2958
Monsanto Chemical, productivity plan includes computer integrated manufacturing. comprehensive energy balance 6333
Monsanto completes acrylic PDF expansion at Alabama plant 809
Monsanto's sale of Hale Manufacturing assets to Polymer Corporation 3885
motions toward eventual merger of J.P. Stevens and WestPoint Pepperell 3099
motivation and efficiency. factors responsible for poor worker motivation 5483
museum, Rheinish Industrial is former cotton spinning mill. showing [1837] industrial plant and life of workers 4779
National Spinning Company color workshop and contests for talented design students 4799
Neckelmann. Danish yarn texturizer for automotive industry 926
Nisshinbo California Incorporated, cotton fabric and yarn mill opening 3092
Nisshinbo California, spinning and weaving plant in Fresno, California 6344
Nisshinbo Industries spinning mill, operations and reasons for high efficiency 2517
nonwovens manufacturers. top twelve United States companies profiled 8748
optimal management of a cotton spinning mill for optimal investment return 7111
paper mill machinery. uses in the manufacture of felt 4271
Paxar, bar coding and woven labels. company profile 2820
Penn International's air pollution control and heat recovery system. features 7128
phenolic. Philene fiber. new production plant 5639
production planning, organization model takes recent economic changes into account 701
productivity. production lay-out and materials handling and storage 5520
profitability, analysis 7174
proposed buyout of J.P. Stevens by senior company executives, plan details 3076
Quarry Bank Mill. working museum of cotton industry 8753
Quick Response, Cone Mills implements. goals and achievements to date 4715
Ramzay finishing agent from Shikibo for preventing itchiness of polyester/ramie blends 2790
restructuring of costing, cost accounting, and profit-and-loss statements in textile plant management 3894
restructuring. affects on cost of textured polyester filament 8749
Rhone Poulenc, fiber manufacturing operation profiled 1475
robotics for materials transportation in mills 5497
Russell Corporation to buy Quality Mills. details 8786
Saint Andre Spinning. implementation of Quick Response 2543
Sandoz. fire and chemical accident prevention and fighting 5494
Sara Lee merger agreement with Adams-Millis and Stedman for hosiery and underwear production 3112
Sara Lee to merge with Adams-Millis 7224
Schlumberger & Cie. company history 8787
security control device, Cerberus CZ 12 unit 7192
Simba Textile Mills, Australian towel manufacturer, products and equipment 5490
small-sized and medium-sized. AMTEC export cooperative 8946
Smith Family processes textile wastes to manufacture wipes 5491
South Carolina mills installing updated opening, carding, and blending machinery 2508
southern United States textile industry, historical perspective 7969
SPC computer software for business management rationalization, tracing corporate development 4709
Springs Industries textile, physical plant modernization program 8935
Stevens' workers at Drakes Branch, Virginia, plant vote to join Amalgamated Clothing and Textile Workers Union 1501
storage, chemical. fire prevention 5495
takeovers probable [1988], rumors point to WestPoint Pepperell being bought out by Fruit of the Loom 7109
takeovers, J.P. Stevens and WestPoint Pepperell, Sara Lee and Adams-Millis 3156
TAMMF conference, factory computer communications standards 5588
technological advances and reality of automated yarn manufacturing plant. ITMA [1987] displays 2496
Tennessee Eastman's Acetate Yarn Department. quality management 7116
Tennyson Textiles, Australian fabric printer. products and future plans 5492
testing. British. bacterial, fungal concentrations 7918
Thomaston Mills, small, private, United States mill. sales, strategies, products 7126
Top Thirty Carpet Companies [1987], study on residential carpet industry top performers, statistics 6170
transport automation by Uhde in a filament yarn plant. objectives and solutions 7133
Tuscarora Yarns, management changes 7860
Unifi textured polyester production. company profile 2240

United States and European textile industries. [1986] rankings, mergers and acquisitions 3871
United States textile mills warned of economic downturn 6408
warehouse, Bebie. five stories tall, handles two to four tons of material 5541
waste processing in Soviet mills. modernization of inferior machinery 4807
weaving mill. effects of different parameters on costs. computer-assisted simulation 2241
weaving mills. comparison of yield efficiency of old and new machinery 2551
weaving, powerloom. role in India's economy 6664
Western Glove of Winnipeg, Canada. company profile 2874
WestPoint Pepperell bids for J.P. Stevens 3114
WestPoint Pepperell to sell Lantor International to Tootal Group of England 3113
WestPoint Pepperell's bid for J.P. Stevens. plans to avoid antitrust laws. other bids for Stevens 3887
WestPoint Pepperell's bid to buy J.P. Stevens. ramifications of a merger 3155
Wiscasset Mills and goals. facility, modernization, products 6558
Wiscassett Mills and yarn product range 8754
Woodrow-Universal increases productivity by 10 percent with new air jet looms 8834
wool consumption and processing at large United States mills 5623
wool. recycling heat energy from drying reduces costs 4734

TEXTILE NUCLEONICS (SEE ALSO OTHER HEADINGS, SUCH AS GRAFTING, RADIATION, RADIOACTIVE TRACERS, STATIC ELECTRICITY)
radionuclide measurement of knitting machine component wear 3863

TEXTILE RESEARCH (SEE ALSO OTHER HEADINGS SUCH AS CONFERENCES, EXHIBITIONS, ETC., AND UNDER SPECIFIC SUBJECT HEADINGS)
acrylic fibers. Monsanto development programs 863
anodic oxidation-induced surface modification of carbon fiber composites 7481
apparel manufacture. development of generic architecture, knowledge-based framework 8594
apparel work stations in Poland. MTM method 8590
Bangladesh jute and world market. research into new applications 7277
bibliographic source information. Textile Technology Digest and World Textile Abstracts 8969
biodegradable plastics. research and development 8422
Central Silk Technological Research Institute. major research divisions 830
chemical protective clothing and equipment. summaries of Federal research programs 7730
computer archiving and networking 3191
Conference, Twenty-ninth Technological. BTRA, SITRA, ATIRA, and NITRA 7265
Consortium for Research in Apparel, Fiber, and Textile Manufacturing. goals and funding 7950
cotton fiber quality evaluation developments 8680
Cotton Incorporated's Research Center to develop innovative cotton products. two new fabrics 5606
CSIRO study on pilling, research results 4378
CVD superconductor coating onto small fibers. research by Georgia Institute of Technology and American Magnetics 4836
Defense Logistics Agency awards research contracts to three educational institutions 800
deformation of cotton single jersey knits. causes and solutions 5967
deposition of drops from liquid dispersion onto fiber 8690
deposition of sliver sulfide in fibrous polymers to enable optical, electron microscopic study 7084
determination of optimum takeup speeds for pad batch dyeing 8904
Dow Corning's technical center in Greensboro, North Carolina, for textile chemical manufacturers 7215
ELIN laser control and measurement system for circular knitting machines 4250
Federal Textile School, Vienna, Austria 7256
fiber composites, spin finish distribution, and fabric pore structure at Textile Research Institute 1596
fibers with superconductor material by chemical vapor deposition 6948
filament yarns. behavior of on air jet looms. properties and requirements 8223
finishing defects. chemical, mechanical, dyeing. German research 7566
future. developments. textile science and engineering 6029
German Wool Research Institute projects in wool, polymer fiber chemistry 7269
Germany. consumption patterns, price versus quality, market research survey 7934
graduate course at Iowa State University integrates clothing construction and fabric characteristics. student study, results 4795
granulated reactive dyes. Drimaren CDG. advantages over powders and liquids 6913
hairiness in worsted and semiworsted yarns. German experiments 7362
industrial fabrics. new glass, polyamide, aramid, and ceramic fabric innovations by Angst & Pfister 4363
joining yarn, Schlafhorst technique. research and development 4967
jute pulp process developed at Bangladesh Forest Research Institute 7279
jute research at Bangladesh Jute Research Institute 7280
knit fabrics. twisting, influence of various factors 5910
Levi Strauss in-house research and development efforts. goals, strategies 5416
lost and non-recorded academic and industrial research information. system to collect, catalog, and disseminate 1597
management and scientific aspects of research and development 1598
market-driven and discovery-driven research 3199
natural dyes. suitability of industrial dyestuffs and alternative to synthetics 6912
NCSU research leads to light, strong cellulose fiber. applications, research, production 6430
NCSU's new textile facility for research and education 7257
Poland, Lodz. history of industry, schools and research institutions 1550
Poland. academic and research center. rebuilding the industry after [World War II] 1592
pollution standards, West German, create problems for launderers and drycleaners 3950
polyester. alkaline saponification rates, results 6273
polyethylene glycol, properties when applied to a substrate. findings 7351
polymer science research and development 6499
potential for control of insect pests through use of insect pheromones 4800
problems in development of fully electronic jacquard mechanism 7177
products, applications. geotextiles, washing machines, clothing. German research 7671
rapier, slay, excessive force on roller. ascertainment by computer program 4196
Rhone-Poulenc fiber activities 2404
Romania 5598
scanning electron microscope. uses 5561
simulation of roller abrasion, deformation, rigidity, strength, torsion, and tension 4711
sizing properties, solubility. hairiness in warp yarns. weft insertion. German research 7401
solid size application to yarns. Georgia Tech University 2561
spinning. yarn migration. mathematical model. trials and results 6586

standards in Germany. fabric alterations using low temperature plasma 7935
symposium for impact testing of plastics, composites. research papers 7243
tactile sensory capabilities and their models 764
technology. Advanced Apparel Manufacturing Technology Demonstration Project. university centers, project goals, products 7667
Texas Tech University's Textile Research Center changing name to International Center for Textile Research and Development 4703
Textile Research Institute [1987] Annual Report. financial statements, research review 6425
Third International Geotextile Congress proceedings 7965
TRASS developments. automatic fabric inspection, permanent fabric stabilization, pattern cutting, automatic cutting 5348
warp sizing. Auburn undergraduate research projects. singeing, abrasion 1739
water purification in dyeing operations. tests and results 6383
wear in velour carpets. relation of fiber fineness, construction 6715
wool and mohair research laboratory. Texas A&M seeks rapid, objective measurement techniques 7807
wool research and development. significant developments in wool processing 4014
wool, early stage worsted processing 4072
wool. ash and mineral content, washing procedures. nylon 6 preparation. polyester yarn structure. German research 7363
wool. Raman spectroscopy. potentials 3042
yarn deformation test methods. German research 7797

TEXTILE TECHNOLOGY (SEE ALSO OTHER HEADINGS, SUCH AS HISTORY)

air jet. L5100 looms from Sulzer Rueti 1755
apparel manufacture. demonstration centers at FIT, Clemson, Georgia Tech 8600
apparel manufacture. IBM and Bobbin Show exhibitions of rapid product developments 8598
Apparel Technology Center. advanced apparel technology evaluation and demonstration 5349
automated work room by Stork-Brabant for Laura Ashley. future projects 6848
automatic cutting systems. new technology worldwide 6982
automation advances from Mahlo, Schlafhorst, Kannegiesser 7894
automation. knitting machinery. ITF-Maille. advantages and disadvantages 7132
Bellini. dyehouse improvements with robotization, electronic control 6875
biotechnology. application to fiber and textile industries 769
British fashion industry. research and development 5420
CAD for flat knitting machinery. VDU Selectanit. new design capabilities 7145
CAD systems. developments. uses and advantages, future 6350
CAD-CIM in spinning, developments at ITMA [1987] 5751
ceramic fiber from oxynitride glass from Shimadzu 2460
changes in textile markets, products 7861
Chinese plans to increase acrylic fiber production. import of United States technology and six new plants 2444
CIM systems for dyehouses. anticipation of total process control 8798
color plated jacquard designs for knits on the KSC-E machine 5908
compact micro-denier fiber extrusion machine offered for POY polyester filament yarn 8197
complete automated systems for clothing construction developed in Japan, United States, and the European Community 7868
composites, metal matrix. advances in technology, boosting interest 1082
computer aided design. developments, uses, advantages 6359
computer science and textiles. conference sponsored by the Italian Assoc. of Cotton Manufacturers 7880
computers. Shima SDS 480 graphic system. display and memory capabilities 8804
conductive, piezoelectric, and high performance polymers. Symposium on Polymers for Advanced Technologies 8040
conveyor belts, manufacture, classification. growth of industry 7041
cotton processing. ITMA [1987]. overview of trends 1586
criteria for technological change, industry decisions, effect of technology 3068
data processing system. CIM applications in textile and apparel industries. conference highlights 6353
designing on the computer. curves 7148
developing countries threatened by high tech, automated industries of developed countries 6409
developments in coated fabrics and coating technology 3671
Dow Corning's technical center in Greensboro, North Carolina, for textile chemical manufacturers 7215
education. textile. current goals and curricula. suggestions for improvement 5596
electronic circular knitting machines by Monarch. design system by Pastec 7453
electronic jacquard transfer. Variatex 2500 in the Mecmor range 7447
electronic stitching, advances, applications 2046
ELIN laser control and measurement system for circular knitting machines 4250
Emmetronic transformation kit by Magrini. needle for needle electronic selection for flat bed machines 8313
energy conservation, flow chart value analysis 3900
enzymes, usefulness in industrial laundering 7713
finishing. Blue-Jay 1000 Stoneless stone wash and 2000 Stoneless acid wash for denim. Pennwalt 2789
frame filter press for bubble wash-out of viscose waste from filter elements 5542
fusing, pressing. innovations in tailored clothing industry 1287
glass-ceramic composites for high temperature use (Conf. Paper) 8375
high technology and competition with low wage countries. United States successes 5350
Hydrofil hydrophilic fiber. potential for texturers 5661
impermeable fabrics, breathable. main producers and their trade names 6077
improved sensors and microprocessors. increased importance of online quality control 7879
Incas' plants and equipment for automatic weighing and for production control 8792
India. conference covering recent trends and developments in textiles 7259
information. computers and programming. new uses 6357
innovation in textile industry 7266
intelligent manufacturing systems predicted for textile industry. Intellitex system from Institute of Textile Technology 3200
introduction of EDI systems and software at the Bobbin Show/AAMA Convention 8799
introductory course to textiles and textile technology 7258
investment by apparel industry. Du Pont executive encourages AAMA. electronic 4509
ITMA [1987] and its revolutionary, unproven productivity advances, assessed at VDF/VTCC and Gesamttextil meetings 7966
ITMA [1987] highlights. trends in industry progress 3148
ITMA [1987]. advances in radiofrequency technology 5587
ITMA [1987]. development of Stork's rotary screen coating. increased production 6153
ITMA [1987]. Protti P94 rectilinear machine with four drops 7457
ITMA [1987]. second part of a general review 2305
ITMA [1987]. trends in CAD-CIM in textile printing. requirements system 6132
ITMA [1987]. weaving techniques, electronic controls 5869
Japan's use of electron beam radiation in development of new deodorant fiber 8549
knitting mills, warp. developments 3463
knitting. CAD for flat machines. Universal MA-5500 pattern system 7135
Korea and its export trade 5575
looms. performance, past and future, determining factors 3437
looms. significant advances promised at ATME-I [1988] 5089

machinery, British industry. computer aided patterning system, jacquard from Bonas, color measurement 3940
management of technology and innovation for long term planning 7127
management roles in integration of the automated manufacturing environment 7889
manufacture of fancy yarns. technologies available and their applications 8204
mercerizing, technology of. wetting 4412
modern pigment printing. technological advances. its use in the field of textile printing 8530
modernization. Springs Industries textile, physical plant 8935
needled nonwovens. examination of process. recent developments in field 6728
new vat dyes by Sandoz. chemically safer process replacing solvents with water 8519
nonwoven fabric production. brief history of and direction for the future 8349
nonwoven fabrics. meltblowing and web bonding processes at James River 8346
nonwovens. improvement in production techniques 6021
patent laws, French, problems. financial incentives for inventors 7253
patent laws. problems, enforcement 7254
presented at American Institute of Chemical Engineers colloquium 6365
printing process. advances by STK, Stork, Kuesters 6135
problems in development of fully electronic jacquard mechanism 7177
production speeds in textile production to increase. technology seen at ITMA [1987]. Paul Wiercks of Werner International 4796
program for ideal pressure between rollers and fiber to eliminate deformation 4722
Quick Response technology and machine intelligence 7115
Quick Response technology. United States industry implementation 7114
rapier, slay, excessive force on roller. ascertainment by computer program 4196
robotics and electronics in Amital's package dyeing plant 8828
sizing agents, cellulose material. substitution of wheat for corn starch 7088
specialized lubricants by Kluber Lubrication. research and development 8836
Sulzer Ruti. looms worldwide. world share data 3867
Swiss high tech machinery. low maintenance machinery with high velocity 7175
technological developments in yarn preparation machinery for cotton and wool spinners at ITMA [1987] 2506
technology in garment manufacture versus quality of workmanship 2275
Textile and Technology Exhibition. Manchester, England 4789
Textile Assoc. of Como. introduction of Telematic Textile Service communications network 7886
Textile/Clothing Technology Corporation's technology center for apparel manufacturers 3691
thermal treatments. control of optimal conditions and efficiency 6960
third Software Market organized by IBM. software available for IBM systems 7885
three dimensional CAD by Gould and Sophis Italia. capabilities if developed 7892
Twenty-First Canadian Textile Seminar International. summaries of papers 5589
Twenty-first New Technology for the Apparel Industry exhibition in East Germany 3989
United States textile industry. energy consumption and potentials for conservation 7180
vacuum extraction technology and applications in India 6818

TEXTILE TERMS (SEE ALSO OTHER HEADINGS, SUCH AS INFORMATION)
chemicals and chemical reactions 3183
chemicals, terms, processes and indole through condensation to silicones 2399
dictionary. chemical properties and compositions 1599
dictionary. chemistry 3184 3185
dyeing and printing processes. terms defined 4400
dyeing, finishing terms. Textile Dyer & Printer textile dictionary 8965
glossary of terms relating to fabrics made from natural fibers 2400
introductory course to textiles and textile technology 7258
nonwovens, definitions lack uniformity, standardization 8416
presence or absence of letter "u" in words containing the root "color-" 1600
trade names and manufacturers. dictionary 7240

TEXTILE TESTING (SEE ALSO OTHER HEADINGS, SUCH AS ABRASION TESTING, BLEND TESTING, CHEMICAL TESTING, COLORFASTNESS, FABRIC TESTING, FIBER TESTING, FRICTION, INSPECTION, MICROSCOPY, QUALITY CONTROL, SPECIFICATIONS AND STANDARDS, SPECTRUM ANALYSIS, STATISTICAL METHODS, TEXTILE CALCULATIONS, TIME STUDY, YARN TESTING, AND UNDER SUBJECT HEADINGS OF SPECIFIC FIBERS AND PROCESSES).
AATCC Technical Manual of textile testing procedures (books) 7957
acrylic fibers. testing for solubility differential in stabilization 7296
active diffusion dyes with antistatic agents, increased diffusion, tests 4439
air mattresses. British standard test method and body-mattress interface pressures 8741
analytical methods for a textile laboratory 651
appraisal of sized yarn behavior in fabrics with Reutlingen Webtester 4681
archaeological tools and analysis of ancient textiles 3807
ASTM wide width strip evaluation for geotextile tensile strength 7841
ASTM [1987] for yarns, fabrics, general test methods 3040
ASTM [1987]. standards, specifications, test methods for various textile subjects 655
Australian Wool Corporation investigation of fiber diameter discrepancies between Western Australian wool testing laboratories 3234
carpets. beater sampler for bacterial content from WIRA Technology/IWS 7204
chroma and value differences perceived by humans in color pile fabrics 1459
coating with the BE8 contact finisher (Polmatex-Cenaro). tests with cotton, cotton/polyester fabrics 4480
colorfastness to bleaching with sodium percarbonate. test method 3053
compression resilience tester. applications in fiber, fabric testing 8677
computer testing of needle-key zone load in circular knitting 7159
contactless length measurement of nonwoven webs 660
controls, testing equipment, instruments. recent developments 2715
correlation of pilling test methods to develop international standard 7085
cotton fibers. criteria for quality. current investigations 6461
cotton fibers. vat dyed and subjected to ultraviolet radiation before treatment with surfactants and washing 5220
creep behavior, technical textiles. ITV pneumatically loaded testing device 8721
CZ-693-3a cotton carder, performance tests, recommended design changes 4903
Czechoslovakian tests and methods on foam finishing. coating, carbonization, waterproofing 4394
deformation determination methods, comparison on repair loom, tests 4205
Deltamoist meter from James H. Heal. measures moisture regain in all textiles 7094
denim for jeans. testing consumer preference to determine ideal parameters 7812

determination of interfacial shear between geotextiles and construction materials 7091
dyeing from an infinite bath, rate of dyeing calculated 1227
dyeing. disperse dye bath preparation. developments. testing and results 6112
dynamic bending properties. effect of environmental gas pressure on measurement. vibrating reed method 1439
EEC directives concerning methods of analysis for textiles 7977
effects of abrasion, stretching, ironing on waterproof apparel seams 6196
fencing, protective garments. resistance to perforation 4609
finite element analysis of advanced composites. integrated approach 4673
flame retardant fabrics. problems with testing 3835
flammability standards in textile testing. need to upgrade 8719
friction regulator, control straw layer unevenness, density 4089
geotechnical centrifuge. role in testing geotextiles 7833
geotextile interlayer for roadbeds. deformation tests for traffic and thermal conditions 7855
geotextile reinforcement and soil subgrade, synergistic behavior predicted with computer model 7834
geotextiles best suited for road reinforcement 7526
geotextiles. creep and relaxation behavior data challenged 6777
geotextiles. field tests as railway bed separating elements 7817
geotextiles. lab and field testing differences, practical modifications 7839
geotextiles. permeameter flow testing of nonwoven geotextiles for drain envelope applications 7092
Gryfalan metallic dyes from Organika (Poland). wool and nylon dyeing, tests 4459
heat transfer, determination of resistance. TGP model 4685
incontinence products. standards. correlating technical tests with user trial data 6765
industrialized nations. varying standards for burn testing 3994
influence of variables in the heat setting of polyester on the absorption of iodine 6605
ITMA [1987]. companies and products 2310
ITMA [1987]. textile testing trends. raw materials, linear textiles, textile fabrics 1436
ITMA [1987]. yarn twist, tension, entanglement 5459
James H. Heal's Deltamoist meter. measures regain 6327
lightfastness in nylon eliminated by using dispersion dyes 5266
N-methylol/sodium fluoroborate shrinkproof finish for cellulose fabrics, tests 4487
needle load sensor device, improved needle design 6731
overview of its roles and importance 6345
particle induced x-ray emission analysis of wool and cotton samples prepared as mordant standards 5474
physiological assessment. pot method 4684
Polmatex-Dofama's BK5 jigger dyer, uses, tests, design 4432
polyacrylonitrile/nylon, viscose/nylon carpets, shrinktesting 642
polyester fibers, dye test for characterizing fiber surfaces. alkali treatment 4656
polymers. vibrating behaviors under various environmental gas pressures. measurement with vibrating reed method 1437
QK 18 sensor for fiber flow data collection on PF-1R spinner, tests 4116
rapier. DSK Fischer loom, amount of flexibility in rapier, determination method 4189
raw materials testing practices by TNS Mills. HVI, Digital Fibrograph, Peyer testing 2208
robotic mannequin being developed to test protective clothing for hazardous conditions 7850
serviceability. furniture and coating materials 6284
sewing. stress to sewing needles during fabric penetration 2040
shrinkproofing woven/polyester fabrics with liquid ammonia 486
sized yarn laboratory testing. sampling, variation, quality assurance 2558
standards, roll length, width, seam breaking strength and integrity, shedding, tear 3057
symposium for impact testing of plastics, composites. research papers 7243
tension caused by cotton yarn knots, factors, best knots for weaving 4209
tension levels affect shrinkage and dye desorption, tests on fabric structure and fiber content 5311
tension levels on warp and weft yarns 4208
test to determine amount of oxyethylated alkylphenol in dye waste water 4767
tests of Sulzer-Rueti PU 85 VSDKR loom in the Bewelana Wool Industry Institute at Bielso-Biala 202
textile field screening kit. determines textile composition 5569
UltraScan spectrophotometer by HunterLab 6291
ultraviolet and visible spectroscopy for assessing the nature, color, and fluorescence of textiles 7081
ultraviolet rays. action during finishing, response of cotton bleached cloth 1905
Uster evenness tester, electrical field distribution studied 662
viscosity variation of starch and APV blendings. new mathematical model 1744
walking on carpets analyzed, lower limb muscle activity and ground reaction forces 1353
warp tension uneven when shed open, tests, method to determine, prevention 4212
washing simulator, dye resistance tester 4682
water retention and the conditioned weight of textiles 7818
weaving. tests to determine optimal parameters for energy conservation. warp tension 4211
woven fabrics. suitability for use in reinforced composite materials 7827
yarn deformation test methods. German research 7797
yarn separation in seam areas, test method, causes, stress level 5470
yarn wool warp, fatigue. effects on weaving. sizing 4148

TEXTILE TRADE (SEE ALSO OTHER HEADINGS, SUCH AS APPAREL INDUSTRY, CARPET INDUSTRY, COTTON INDUSTRY, COTTON MARKETING, FORECASTS, HISTORY, HOSIERY INDUSTRY, KNITTING INDUSTRY, LEGISLATION, MANMADE FIBER INDUSTRY, MARKETING, REGULATIONS, SILK, TEXTILE INDUSTRY, WEAVING INDUSTRY, WOOL INDUSTRY)

American Association of Exporters and Importers opposes [1987] Textile and Apparel Trade Act 2332
AMTEC export cooperative for small-sized and medium-sized mills 8946
apparel industry [1986] and beyond. demand, imports, economic trends, population shifts 5563
apparel, tariff and trade classification. Harmonized Commodity Code for United States, changes 7953
Asian exports. past, present, and future impact on the West 772
ATMI warning for South Carolina lawmakers to guard against potential textile industry recession next year. reasons for prediction 3157
ATMI warns United States Customs to better control flow of illegal imports. better-trained staff needed 7232
Bangladesh's share of world jute market. decreased demand and search for new applications 7277
Bangladesh. [1987] production figures, [1988] expectations 8956
bilateral textile agreement between United States and Soviet Union 1572
bilateral trade agreement between United States and Mexico, agreement details 2376
Brazil. international expansion markets 3158
British home furnishings market. present, future growth 8943
British Silver Studio Collection designs for United States home textiles manufacturers through Nigel French Enterprises 5445
British textile and apparel exports, products. increase [1987], exports to United States, Western Europe 3159
British withdraw proposal to label furs caught in leghold traps, pressure from Canada, fur industry 5566
Canada announces duty remission plan for imported fabrics. American Textile Manufacturers Institute protests 3160
Canada, free trade zone. American Textile Manufacturers Institute's

concern 1560
Canada/United States free trade agreement. study on effect on Canadian productivity and employment 2341
Canada/United States trade pact, safeguards against transshipment 3161
Canadian subsidy plan. American textile reaction 2342
Caribbean Basin Initiative, possible expansion and duty free treatment under Congressional review 1561
carpet industry, West German. imports overtake exports for first quarter [1987] 4781
carpets, hand knotted woolen, from India 2815
cashmere problems in China. contamination and lowered fiber availability 4818
Census Bureau data survey thwarted by President Reagan. textile committee crippled 7228
China to boost production of chemical fibers and linen fabrics. new facilities 6413
China's agreement to limit export growth to United States, agreement details. industry and congressional reaction 1562
China's apparel exports rise, reasons 7017
China's plans to become second largest world producer of manmade fibers. foreign market influence and domestic expansion projects 891
China's polypropylene production expanding 7226
China's [1987] export tally for textiles, apparel. United States/China textile, apparel export agreement, Chinese plans 2343
China, wool and silk cocoon shortages. threaten garment, fabric output, government controls panic buying 7233
China. domestic shortages of cotton textiles due to excessive exports 2413
China/United States. National Knitwear and Sportswear Association accuses United States officials of disguising deal in trade pact 1563
Chinese plans to increase acrylic fiber production. import of United States technology and six new plants 2444
Chinese textile industry, significant growth predicted 8953
coated fabrics. trends in next five years. products, markets, prices, import competition 6000
Commerce Department's [1988] import limits for Chinese textiles, figures for various categories 2344
complex country-of-origin rules for Free Trade Zone with Canada 1573
compromise omnibus trade bill, victories for importers and retailers. industry reactions 3174
Congressional Textile Caucus's and ATMI's opposition to Canadian Free Trade agreement 3163
consulting at ITMA [1987]. Werner Associates International 6337
cotton exporting countries. cotton policies of United States competitors. subsidies 7222
cotton. agricultural policies in United States and other countries. change, effects on future production and trade 7217
cotton. world production, consumption 5612
cotton. world trade, stocks, production, consumption. global data 4005
Courtaulds North America to merge with Liberty Fabrics. details not disclosed 7125
customs crackdown on imported illegal children's sleepwear, violation of federal flammability standards 6400
Customs inspectors' textile field screening kit, determines textile composition 5569
dollar, influence of drop on foreign textile trade. United States tax laws, foreign interest in retailing 2377
domestic needle trade industry. discussed at Bobbin [1987] 542
Du Pont and Akzo patent disputes over Kevlar (TM) and Twaron aramid fibers 4777
dye industry currently dominated by problems with low-cost imports 409
EEC and principal industrialized nations, evolution of textile industry. outlooks 5567
EEC. developments and trends for past thirty years in textiles 7234
EEC. [1986] balance of trade 1564
EEC. [1986] main suppliers for fibers, fabrics, garments 1566
EEC. [1986] principal customers for fibers, yarns, fabrics, and apparel 1565
EEC. [1986] trade data for fibers, apparel, and general textile products 1567
European Community. Article 92 of EEC Treaty regarding State aid 5570
European Community. guidelines for filing anti-dumping or anti-subsidy complaints 2345
European manmade fiber producers await decision on dumping of imported polyester 4851
exchange rates, economic growth, and export performances of various countries are compared 2378
export market for United States decorative fabrics 1574
export prospects for domestic textile and apparel manufacturers. tips for successful export program 791
factoring business [1987-1988] for Southwest. modest growth expected 2009
factoring. Southeast. increases [1987], lower volume [1988] increase. [October 1987] stock market crash, flattening economy 2008
Far East/Southeast Asia sourcing, comparative analysis, advantages, problems 5571
fiber consumption used as forecaster for apparel consumption 8948
fiber, textile production, consumption, and trade statistics on USSR, Eastern Europe (books) 7931
financial directory of United States textile, apparel companies 8922
flax. Soviet Union largest producer, while Belgium commands highest prices 3229
Frankfurt textile fairs. interview with Dr. Stauber 2346
Free Trade Agreement with Canada, what it means for United States textile businesses 7951
free trade between Canada and United States. Dominion Textile supports 3978
free trade zone with Canada. complex country-of-origin rules, details 1575
free trade. United States and Canada. adjustment and transition provisions hoped for by Canadians 3977
French imports, exports and United States men's wear. French Men's Wear Federation's report 2347
French textile machinery manufacturers. sales, export market, products 7185
GATT ruling causes drafting of legislation to reform the Customs user fee. new plan 3164
German industry. production practices abroad. results 6346
German textile machinery, exports to United States 7186
Germany. survey of consumption patterns, price versus quality 7934
global supply, demand, and prices. USDA estimates 2401
gray goods market for first half of [1988], predictions. market events for end of December 1577
gray goods market [second week December 1987], United States-Soviet textile pact. imports of Russian sheetings 1092
gray goods market, [mid-December 1987]. minimum trading, looms switch to polyester/cotton blends from cotton, import market 1576
Great Britain, effect of Multi-Fiber Agreement, relation to international trade 2334
Harmonized Commodity description and coding system. comparison of entry duties in major industrialized nations 3974
Harmonized System, United States Customs Service. [1988] merchandise classification system for importers 1568
Harmonized Tariff System to affect blend levels of certain imported fabrics 5572
Hollings, Senator Earnest. profile. proposed textile legislation 770
home furnishing textiles, United States. industry production, trade statistics 8929
Hong Kong's economy, economic indicators, control-center roles. Japanese trading company subsidiaries 3165
hosiery industry, United States imports only 3.7 percent of domestic market. exports rising 3531
Hungarian knitwear industry. ten years of changes in export

structure 7936
importing practices. AAMA chairman blasts domestic textile industry for shortages in cotton yarn and yarn dyed fabrics 4776
imports threaten future of domestic textiles. ATMI chief economist discusses [1987] Apparel Trade Act 5475
imports, textile and apparel, up nearly eleven percent [October 1987]. reasons, industry reaction, government statements 1578
imports. recession predicted because of increase. ATMI report 3157
India's apparel export industry remains competitive 8583
India's jute industry, projected growth 2427
India. seven consumer groups surveyed for consumer protection measures to ensure fair trade 3960
Indian exports of hand knotted woolen carpets 7031
industrial fabrics, United States market analysis by Frost and Sullivan 2673
industrialization [1960's to 1970's]. developed and developing countries 7239
industry. United States leadership challenged. Filter Media Consulting report 4375
interim revised textile category system for determining import textile and apparel quotas and visas 1579
international fiber market and community, export, production, policies. main market influences 6427
International Trade Commission study. United States imports of textiles and apparel from Communist countries and other figures 2348
international trade flows of raw cotton among exporting and importing countries [1986/1987] 7221
Israel. apparel and textile exports [1987]. sales and export figures 3167
Italian hosiery industry. [1987] showed drop in exports and rise in imports 7940
Italian knitwear manufacturers' expectation [1988]. worst sales year for two decades. Far East competition pessimistic 2349
Italian textile industry, profile 7230
Italian. reaction to declining sales and Asian competition 8938
ITC study on 807 sourcing for United States textile and apparel manufacturers. advantages 3166
Item 807 program documentation for apparel imports. 807WORKS software program to handle paperwork 5573
Item 807 study by International Trade Commission, results 3975
Jamaica's apparel manufacturing industry, impact textile and apparel trade bill 1569
Jamaica, efforts to become top Item 807 performer, programs with United States 5574
Jamaica. rapid growth of exports. problems with textile industry 4698
Japan. [1984-1986] surface active agent production 8783
Japan. [1985-1986] inorganic pigment production 8524
Japanese export trade outlook for future, manufacturers describe market position and plans 3168
Japanese imports of United States, Australian, Chinese, and Pakistani cotton figures 2414
Japanese knitting companies seek protectionism against increasing imports, upgrade machinery to remain competitive 6692
Japanese manmade fiber industry [1984-1986] 8078
Japanese manmade fiber industry, effect of strong yen and rising imports 4853
jute industry in Pakistan. impact secession East Pakistan 827
jute, global demand and [1995] outlook 2423
Korea. rapid growth of exports. manufacturing trends and world economic situation 3169
Korean exports 5575
licensing agreement between Czechoslovakia and United Kingdom to jointly produce Lee Cooper products. double production 2379
machinery. ATMA interview discusses international competition 3943
major changes in last twenty years 3197
Malaysia. prospects for international expansion 3170
manmade fiber industry in Britain suffering because of increase in imports 4847
manmade fiber industry in United Kingdom 5671
manmade fibers and world trade trends. future trade policies 7943
manmade fibers import-export balance for [1987], compared to preceding seven years 8945
manmade fibers. China installs production facilities. import and export situation on natural and manmade fibers 4849
manufacturing and marketing patterns [1960-2000]. history and predictions 5581
manufacturing costs and pricing structure in the tufted carpet industry 2163
Marianas Islands, labor conditions. United States trading relations 1570
markets, product changes. influence of modern textile technology 7861
medieval England, foreign textiles 1580
men's wear, United States. industry production, trade statistics 8920
Mexico and United States cooperative production efforts. Maquila program 5576
Mexico. restructuring program for competitive stance in world market 8951
network distribution marketing in India 8958
nonwovens industry. challenges and opportunities resulting from European Community integration process 4987
nonwovens international markets. considerations for exporters 5582
overview of international trade agreements 3175
Pakistan. [1986-1987] cotton situation. prices. trade research 7982
Pakistani cotton industry. bilateral trade agreements 6402
People's Republic of China and Hong Kong. [1997] lease termination on garment industry 6230
Polish. restructuring of knitting industry companies and problems with overall economy 8970
Portugal gains momentum as exporter to United States. Portuguese Offer textile show 5577
Portuguese. massive slowdown in exports as economy moves in line with EEC policies 8954
Prato, Italy, carded wool sector meets challenges of decreased demand for woolen goods 1630
production and consumption of cotton 8941
projected spunlaced nonwovens manufacturing capacity. demand, consumption figures 1809
protectionist strategies 2333
Puerto Rico, programs to help Caribbean region to become a worldwide exporter 5578
report on world trade in textiles and apparel released by FFACT. United States and need for realistic policy 4775
restrictions in light of domestic economic forces. E. F. Hutton report. effect on specialty apparel industry 1581
role of trade representative as disseminator of information between commercial and industrial concerns 3979
Senator Hollings blasts trade representative Yeutter for criticizing textile quota bill 7235
sheets, pillowcases and towels, total United States shipments, [1984-1987] statistics 2380
silk market outlook. increased prices, China and India exports, fashion trends 2430
sourcing fashion, global markets, data on exports 1582
sourcing in the Caribbean. Item 807 program. important considerations 5583
sourcing in the Caribbean. new 807 arrangement and problems that can occur 5353
sourcing in the Far East, problems and advantages. domestic manufacturers describe market connections with Orient 3176
sourcing. domestically, the Orient, and the Caribbean 2812
Special Regime. textile agreement between United States and Mexico 5579
statistics on synthetic fiber and yarn production and trade in India 7975
stock market crash [October 1987], effect on United States textile and apparel industries 2381
Strojimport Foreign Trade Corporation. services to overseas

customers 7952
Swiss textile machinery manufacturers in the United States, closer relations, strategies and products 6805
Swiss textile machinery, United States demand and how Swiss are coping, popular and new products 7187
tariff quotas proposed to replace Multifiber Agreement and bilateral restraint arrangements 2382
textile and apparel exports from Hong Kong, Taiwan, China, Korea. market positions and plans 3177
Textile Trade Bill. HR 1154. import legislation demand. interview with Carlos Moore, vice president of ATMI 2350
Textilimpex of Poland profiled. imports and exports, machinery 1469
Thailand. garment industry. production, consumption, exports. study results 2127
ticketing manufacturers taking EDI to Far East and Western Europe. Quick Response 4724
trademarks as decoration or not on garments. court case and decision 7941
Turkey's textile industry. role in economy. government role, exports and imports 3972
United Kingdom and United States. wool noils 2385
United Kingdom dyeing and finishing industry, hurt by international competition 3561
United States and Bangladesh. new import restraint limit for manmade fiber sweaters 2365
United States and China promote communication and trade 8957
United States and China. impact of apparel imports from China 6416
United States and Costa Rica. level of restraint for cotton textiles produced in Costa Rica 2362
United States and developing countries, imbalances between 2366
United States and Dominican Republic. deduction in charges made to restraint limit imposed on [Category 340] 2372
United States and Hungary. adjustment in current limit for some categories of wool textile products 2375
United States and Jamaica. charges deducted with textiles assembled in Jamaica 2352
United States and Korea. restraint limits imposed on some categories of textiles 2361
United States and Malaysia. categorizing silk blend and other vegetable fiber textiles 2374
United States and Maldives. import limits on wool sweaters 2353
United States and Mauritius. bilateral agreement on import restraint limits and transfer of charges 2359
United States and Northern Mariana Islands. reduction on imports of sweater will result in embargo 2373
United States and Pakistan. new export visa arrangement and exempt certification for some categories of textiles 2354
United States and People's Republic of China. agreement on silk blends and other vegetable fiber textile products 2358
United States and People's Republic of China. export licensing system extended to include sweaters 2351
United States and People's Republic of China. import restraint limit for manmade Category 611 textiles 2369
United States and People's Republic of China. import restraint limits on manmade fiber coveralls from China 2356
United States and People's Republic of China. increases in import restraint limits 2370
United States and People's Republic of China. level of restraint for polyester and cotton yarn produced 2360
United States and Philippines. increase of restraint limit on Category 433 products 2371
United States and Soviet Union agreement on import quota levels for cotton sheeting and printcloth. industry reaction 2368
United States apparel and textile industries. transformation and effects of policy decisions 7948
United States apparel producers, successful exports into foreign market, entry, methods 5580
United States Commerce Department's embargo on India to be lifted 773
United States Commerce Department's report [January 1988] textile and apparel imports 3162
United States Custom Services' interpretation of item 807 regulations challenged by textile and apparel manufacturers 6414
United States Customs' regulations for Mexican apparel manufacture, industry reacts negatively due to low profit margin 6415
United States Department of Commerce report on domestic textile and apparel imports [1987]. details by country and category 2363
United States export licensing system amended. Chinese exports. silk blends, vegetable fiber products 771
United States factoring executives' expectations [1988]. effect of economy and import market 1994
United States import limit for cotton and manmade fiber products from Thailand 789
United States import limit for cotton products from Soviet Union 787
United States import limits for cotton and manmade fiber products from Romania 775
United States import limits for cotton and manmade fiber products. Jamaica 790
United States import limits for cotton products from People's Republic of China 783
United States import limits for silk blend and vegetable fiber sweaters from People's Republic of China 778
United States import limits. cotton and manmade fiber products from Mexico 781
United States import restraint limit for manmade fiber products from People's Republic of China 774
United States import restraint limits for cotton and manmade fiber products from Haiti 779
United States import restraint limits for cotton products from People's Republic of China 784
United States import restraint limits for manmade fiber products from Pakistan 782
United States import restraint limits for wool products from Czechoslovakia 776
United States import restraint limits for wool textile products from Poland 777
United States import restraints. Singapore cotton and manmade fiber 785
United States imports from Mexico. review of countervailing duty order 786
United States imports of viscose rayon staple from Sweden. review of countervailing duty 780
United States knitting industry. imports, production, machinery 1030
United States raw cotton prices become more competitive through USDA price structure changes 5610
United States sheet, towel, pillowcase manufacturers. [1987] production 5446
United States shipments of sheets, towels, and pillowcases 3171
United States tariff schedule in Harmonized System Nomenclature. textile and apparel categories 2355
United States textile and apparel imports from Communist countries. ITC study 3172
United States textile companies. Heimtextil, India, Indonesia, China, Mexico 3173
United States textile industry [1988] performance predicted. imports, consumer 2357
United States trade agreement with China. limiting imports. effect on new and old business 2364
United States Trade Representative warns of GATT's waning effectiveness 788
United States worries that Europe [1992] plan will foster protectionism 7236
United States yarn producers contemplate export market. other activities and production strategies 2498
United States [1987] mill consumption, imports and exports, domestic consumption of natural and manmade fiber 3201
United States [1987] textile and apparel trade deficit 2367

United States, apparel buyers' strategies [fall 1988] effect on mills and prices. delay in placing Far East orders 1993
United States-Canada Free Trade Agreement to curb illegal transshipments, FTA certification program 7237
United States-China textile trade pact limits China's export growth to three percent annually. details 1571
United States. three phased program to compete with imports and improve market share 5564
Universal Standards Agreement. regulates international trade standards 821
vertical market improvements and Du Pont's sixth Annual Industry Forum 8924
West Coast factors. [1988] outlook for manufacturers and importers 2007
West German's textile trade policy, current market 7238
West Germany's machinery export business in Latin America 4774
West Germany. analysis [1987]. downturn in apparel, dyeing, finishing industries 3976
Western Europe 3973
wool and cotton. supply and demand 2406
wool buying. function and methods of the wool buyer, financing of wool exports 2383
wool industry. United Kingdom 3178
wool programs in Australia, Soviet Union, China, and Western Europe 4826
wool, Australian, exporting and marketing 7290
world cotton prices, supply, consumption [1986-1987]. Soviet cotton and textile industry, imports, exports 3226
world economy and development trends. changes in textile markets, growth of production and consumption 3980
world textile trade and production trends by country 2384
world textile trade and production trends 8955
world trade in textiles and apparel. industrialized and third world nations 8959
world trade. [1980-1986] general growth trend and some change in distribution patterns 5584
worldwide consumption of fibers [1984-1986] 8942

TEXTURED YARNS (SEE ALSO OTHER HEADINGS, SUCH AS CORE YARNS, CRIMPING, CRIMPING MACHINERY, ELASTIC YARNS, STRETCH FABRICS)

abrasion of fabrics based on air textured yarns. SEM study 7477
air blown. ability to give filament yarns the appearance of natural fibers 3381
air entangled process from Texture-Tex 8191
air jet nozzles. air flow geometry and shock wave influence on texturing 6606
air jet textured yarns. testing methods 5816
air jet texturing machine, RMT. Staehle 4969
air jet texturing process reviewed 3385
air jet texturing. inlet pore diameter of guide needle and throat diameter of outlet passage analyzed 1708
air jet texturing. process description 5805
air jet. influence of process and supply on properties 4961
air textured filament yarns. expansion of horizons through use of finer filaments 7386
air texturing and intermingling equipment seen at ITMA [1987] in Paris 965
air texturing and intermingling. developments at ITMA [1987] exhibition 4962
air texturing machine, AM4 from Barmag 4968
air texturing systems from Barmag 8199
Barmag. spin-drawing, texturing, and winding machinery 5666
bibliographic source information. Textile Technology Digest and World Textile Abstracts 8969
bulk. standards, methodology set by ASTM and Du Pont 8972
carbimide yarns. heat treatment effects on properties 8219
continuous filament synthetic yarns. overview of processes 1714
copolyester. structural, physical extension stress compared to polyester 8112
crimp determination. bulk testing standard from ASTM, Du Pont 8686
developments in industry. machinery at ITMA 2542
developments in texturing machinery and products to be seen at ITMA [1991] 7387
double twisting, twist texturing, and fixing. ITMA [1987] 4948
Drawframe RSB 51 draw-texturing machine. United States production 5802
Du Pont's Supertec 90 will revolutionize texturing process 4865
Du Pont's Supertec Nylon 90, texturing at high speeds. industry reaction 6613
dye affinity tester FYL-500 by Toray 8696
dye uptake testing. Toray FYL-500 continuous affinity tester 8700
false twist and air texturing machinery. ITMA [1987] 4960
false twist texturing. latest developments. process stability and management 6607
filament yarns used in air jet texturing 8201
flow field in yarn path 166
friction discs for texturing from Kyocera 8202
history of textured nylon yarn production in United Kingdom by Viscosuisse 7388
hosiery industry, stockings. greater demands on quality, especially control of irregularities 3390
Hydrofil hydrophilic fiber. potential for texturers 5661
India. applications and production 5804
industrial fabrics market potential grows 8220
intermingled. NPT R-2060 automatic needle pull tester 5462
ITMA [1987]. false twist and air jet texturing machines 8200
jute/polypropylene textured yarn properties 4142
knit apparel sector. the look and feel of spun yarn 8221
machinery, draw texturing, from Rieter 5806
manufacturing industry. recuperation made [1987 versus 1986] between supply and demand 8788
monitoring system. yarn breakage and entanglement during unwinding 4966
Neumag. new spinning and processing lines 5758
new techniques for filament yarns. gains in quality. ITMA [1987] 6602
novelty, air jet double vortex method, machinery 4963
nylon 6 and 66 compared for substitution in Hungarian hosiery manufacture 8210
patterning technologies for top, yarn spinning systems 8144
performance in apparel and household and industrial textiles 1726
polyester fiber development in Pakistan. partially oriented, draw-textured yarn production developments 8069
polyester filament. performance and new esthetics counter negative image 8213
polyester production. mill restructuring, technology 8749
polyester, dyeing. energy saving system 1926
polymers. thermoplastic. uses of false twist texturing 3386
polypropylene BCF. continuous spin-draw-texturing 5807
process parameters, analysis of texturing 5808
production alternatives. hot fluid, cold fluid texturing 1713
spandex yarns. Enterprise Machine's ELAST-A-LACER model 20, air jet technology 6603
stuffer box machinery and texturing methods, nylon and polyester carpet yarns 164
surface alteration, examined by electron microscopy 8271
teasel napping, tests on factors affecting yarn hairiness 4964
technical and fashion textile markets 8222
testing equipment from Rothschild Instruments, Shirley Developments, and Textechno-Herbert Stein 8691
textured combined yarns. preparation parameters and strength 3394
texturing machinery. innovations at ITMA [1987]. automation in management 6604
texturing machinery. new solutions in the 3SD series by RPR 6608
texturing machines, trend analysis. ITMA [1987] 2530
thermofixing of false twist, stretch textured, polyester yarns. crimping properties 4138
Unifi textured polyester production. company profile 2240
unwinding behavior 5809
yarn texturing technology. ITMA [1987] 3384

TEXTURING, SEE CRIMPING.

THERMAL DEGRADATION, SEE DETERIORATION OF MATERIALS, FLAMMABILITY.

THERMAL PHENOMENA, SEE HEAT PHENOMENA, TEMPERATURE.

THESES

THORNEL IS A CARBON FIBER.

THREAD, SEE SEWING THREAD, YARNS.

THROWING, SEE TWISTING.

TIME STUDY (SEE ALSO OTHER HEADINGS, SUCH AS INDUSTRIAL ENGINEERING, MANAGEMENT, OPERATIONS RESEARCH, PRODUCTION CONTROL)
- apparel work stations in Poland. MTM method 8590
- Personal Best! sales incentive program for industrial launderers 8619
- sewing operators and their activities 5391
- stitching technique. machine and operator factors 8611
- work factor process. time study for garment assembly 2298

TINTING, SEE FUGITIVE TINTING.

TIRE CORD (SEE ALSO OTHER HEADINGS, SUCH AS RUBBER PRODUCTS)
- adhesion testing. samples prepared by cold bonding 6325
- adhesion testing. samples prepared by hot bonding 6326
- fatigue behavior of PET tire cords, degree of polymerization and twist 1449
- Kevlar aramid reinforcement in Pirelli racing and commercial tires 3250
- Kuraray and Unitaka commercializing vinylon fiber as a possible asbestos and tire cord substitute 5719
- mathematical model, flow in spin bath 5632
- nylon 6 and nylon 66 tire cords. thermo-mechanical, dynamic mechanical properties compared 7389
- nylon cord for rubber tire reinforcement. thermo-mechanical properties of nylon 6 and nylon 66 compared 7395
- nylon. outlook in India, overestimating demand 969
- PET bristle used as model for fatigue and wear behavior of tire cord 8698
- PET. processing and characterization 968
- polyester tire cord. development of HMLS fibril-to-fibril chains by Hoechst Celanese 8211
- polyester. improvement of melt spinning techniques (Abstract) 8065
- polymer fabrication process in relation to nonuniformity in filament diameter 4125
- spin finishes. chemicals, components, requirements 1262

TOPS, SEE COMBING, TOW PROCESSING, WORSTED SYSTEM PROCESSING.

TORAYCA IS A CARBON FIBER.

TORLEN IS A POLYESTER FIBER.

TOW
- Kevlar/J-2 tows for high performance composites 4305
- manmade tow for nonwovens applications 2494
- Model D6/5RS cutting converter from Schlumberger 3318
- scutching hemp fibers into tows on flax industry machinery for spinning blends with polyester or jute 4913
- viscose tow. plasticized stretching. formulas for calculating stretching forces 96
- viscose, manmade, variation in length allowable for rotor spinning 4943

TOW PROCESSING (SEE ALSO OTHER HEADINGS, SUCH AS CRIMPING MACHINERY, CUTTING MACHINERY, SPINNING, STEAMING)
- Fleissner. manmade fiber production machinery 5743
- Lummus Industries blade monitor for tow cutting machinery 6572
- manmade tow for nonwovens applications 2494
- Model D6/5 converter from Schlumberger 2509
- polyester/cotton staple yarn, pre-yarn processing, dyeing, spinning, twisting 4900
- polymer to sliver by ECOSPUN process from Didier Engineering 888
- polypropylene properties affect tow and staple processing 3291
- spinning of flax tow on cotton and worsted system technologies 3337
- stretch break converting. polyacrylic fiber and worsted yarns 1689
- TOWFIX-R unit for the thermic treatment by saturated steam of synthetic fiber tows (Conf. Paper) 8139
- winding. thermoplastic impregnated tows of carbon, Kevlar and fiberglass. economics and properties 4174

TOWELS, SEE FABRIC PRODUCTS, TERRY FABRICS.

TOXICITY (SEE ALSO UNDER OTHER HEADINGS, SUCH AS CARCINOGENS, HEALTHCARE AND MEDICAL TEXTILES, INDUSTRIRAL HEALTH AND SAFETY, LEGISLATION, REGULATIONS, TEXTILE CHEMICALS)
- azo dyes and dye intermediates. design of non-mutagenic dyes 7906
- azo dyes. EPA testing of C.I. Disperse Blue 79. biological wastewater treatment systems 7907
- bracts. tannin content of bracts studied on three cotton varieties in the United States 6437
- ceramic fibers. potential hazards, toxic effects 7309
- chlorophenol determination by ultraviolet absorption 1256
- coalescence of disperse dyes, testing. hazard during manufacture and application 440
- cotton dust tannins. effects on pulmonary cells 8900
- cotton dust. emphysematous and fibrotic responses of lung tissue 8911
- cotton dust. isolated cell bound endotoxin relationships 8882
- cotton dust. studies of cholesterol, ionic calcium role in byssinosis 8889
- disperse azo dye wastewater toxicity reduced 7909
- Disperse Blue 79 degradation in the waste activated sludge process 7905
- dye wastes entering landfill via sludge from biological treatment plants 7911
- dye wastes removed via electrochemical cell. chemistry, costs. pilot studies 7910
- dyes, in water source, tested 5550
- dyes, non-mutagenic. replacing benzidine residue with non-carcinogenic agents 448
- dyes, non-mutagenic. replacing carcinogenic dye intermediates with safe chemicals 447
- dyes 7194
- food poisoning increased by poor clothing hygiene. workwear rental companies provide laundering service 8914
- formaldehyde release. durable press finishing of cotton fabrics 7639
- hexamethylene diamine. structure. uses. toxicity data 2717
- LPS from cotton dust. unreliability in sample comparisons 8910
- mitogens and tannin, contribution to byssinosis 8862
- reduction of disperse azo dyes in bottom sediments in the environment. potential hazards 7914
- sorption isotherms. azo dye fate predictors in activated sludge wastewater treatment process 7915
- testing standards, classifications, and methods. manmade fibers 4657

TRANSPORTATION, SEE MATERIALS HANDLING.

TRAVELERS, SEE RINGS AND TRAVELERS.

TREVIRA IS A POLYESTER FIBER.

TRIACETATE FIBERS, SEE ACETATE FIBERS.

TRICEL IS AN ACETATE FIBER.

TRIMMINGS, SEE FASTENERS AND TRIMMINGS.

TRYPTOPHAN, SEE WOOL, WOOL FIBERS.

TUFTED CARPETS (SEE ALSO OTHER HEADINGS, SUCH AS CARPET BACKINGS AND BACKCOATINGS, CARPETS)
backing, singeing process. Ernest Turner's Parex burners 8466
European markets 2165
Herforder Teppichfabrik's tufted carpet design competition and results 3785
manufacturing costs and pricing structure, small- and middle-sized manufacturers 2163
processing films and tapes on Malimo stitchbonders 6730
surface fiber removal from Parex singeing burners 7573
textile research. wear and carpet construction, fiber fineness 6715

TUFTED FABRICS

TUFTING
ST range from Cobble Blackburn. programmable sliding needle bar drive for patterning carpets 5103
trends at ITMA [1987] automation, computerization, consolidation of processing steps 4298

TUFTING MACHINERY
carpet manufacture. ITMA [1987] trends 6249
carpet manufacturing and processing machinery displayed at ITMA [1987] in Paris 1001
Cobble Blackburn ST 88 tufting machine with strengthened frame and drive 6732
developments from Card Monroe, Chattanooga Tufters, Cobble Tufting, Nakagawa Seisakusho, and Tuftco 2010
Dextralog FS200 data collection and information system for tufting machines 1072
Hollytex Carpet Mills profile. automating the tufting process 2162
ITMA [1987]. nonwovens. equipment displayed 1152
ITMA [1987]. tufting machines for wide fitted carpet fabrics 1815
Notio Maskiner's modular carpet backing unrolling system 2300
photo-optical electronic scanning system to detect missing threads beneath tufting needles by Erwin Sick 1073
ST range from Cobble Blackburn. programmable sliding needle bar drive for patterning carpets 5103
trends at ITMA [1987] automation, computerization, consolidation of processing steps 4298

TULEN IS A MANMADE FIBER.

TULTRIM IS A NYLON FIBER.

TWARO(N) IS AN ARAMID FIBER.

TWIST (SEE ALSO OTHER HEADINGS, SUCH AS CRIMPING, SETTING, YARN GEOMETRY)
acrylic rotor spun yarns. assessing total twist from apparent yarn twist and yarn strength at theoretically null twist 970
acrylic yarn 3387
breaking behavior of twisted yarn 7396
carboxymethylated viscose yarn, twist effect on properties 4974
crepe. influence on hand 1840
digital multifunctional yarn twist tester. BTRA 8697
double yarns. effects of doubling twists on yarn properties 6601
Dref III friction spun yarns. equivalent machine twist 4944
false twist drawtexturing. transient behavior effects on threadline twist 7383
hand spinning commercial flax via worsted spinning and the long draw 7374
hard twist yarns. forces in heat setting and winding 7381
heat setting. effects of heat transfer on hard-twist yarn 8577
machine twist in rotor open end spun cotton yarn 7065
multifilament yarns. twist tenacity 5817
nylon core yarns affected by sheath fiber denier, twist, dyeing treatment 976
open end friction spun yarns. analysis of twist 4945
residual twist of ring and rotor spun yarns. study of thirty-six yarns 3353
rotor spun cotton, cotton/blend yarns. thickness, twist and staple length, relation to breaking load 6588
silk yarns. fixation of twist by steaming 5794
singles and two fold woolen carpet yarns. twist effect on rub felting process 1259
surface, friction-spun yarn. simulation of perforated drum influence 8177
wool/polyester yarns. effects of Lavsan content on yarn uniformity, abrasion resistance and elasticity 180
Zweigle D 312 twist tester 4147

TWISTING (SEE ALSO OTHER HEADINGS, SUCH AS BALLOONS, CRIMPING, WINDING)
air twisting of triacetate/nylon yarns, machinery, method 152
combination-twisting. Hamel 2000 uptwister 5797
cotton and viscose manmade blend. proper twist on air jet spinners 153
developments at ITMA [1987]. computer control systems and robotics 6627
double yarns. effects of doubling twists on yarn properties 6601
electrostatic spinning. tube twister mechanism and efficiency 138
false twist texturing. latest developments. process stability and management 6607
hard twist filament yarn. tension generated by twister with false twist spindle 2527
Mak cotton knitting yarns, production, dyeing 170
methods for polyester yarns on Hoechst spinners, production of two-ply polyester yarns 154
patterning technologies for top, yarn spinning systems 8144
polyester, viscose, viscose/polyester filament yarns, twisting, uses 182
process, various. Suessen's Plyfil 6596
ring twisting. effects of operating parameters 8203
rotor twisting, high speed. cotton fiber requirements 6577
self twisting and strand twisting. theoretical relationships 1709
splice strength and elongation 4946
tension effects on other processing factors. computerized determination 4947
textured carbimide yarns. heat treatment effects on properties 8219
yarn. developments, state-of-the-art, future trends. machinery and processes 957

TWISTING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS BALLOONS, BOBBINS, CRIMPING MACHINERY, RINGS AND TRAVELERS, SPINDLES, WINDING MACHINERY, YARN PROCESSING)
Atex control system by RPR for monitoring of plants and machinery 6608
automated. shown at ITMA [1987] exhibition. linkages between winders and twisters 6579
balloonless twister, Hamel 2000. creates yarns without assembly operation 3375
combi-twisting system, Hamel 2000 unit 5795
combined spinning and twisting of polyacrylonitrile high bulk yarns on SKF-1 and SKF-2, industrial applications 150
data monitoring systems for Saurer Allma TM twisting machines. capabilities 7882
false twist texturing. latest developments. process stability and management 6607
fancy twisting machines. Saurer-Allma's ESP 1 and 2, FM-F 4128
fancy-yarn twisters. Saurer-Allma multiprocessor control system 8194
Hamel 2000 hollow tube combi-twister. advanced twist quality and

low cost 8192
Hamel 2000 twisting machine from Carl Hamel 3374
IPE twist intensifier on BD-200 series rotor spinners, yarn properties 4126
ITMA [1987] highlights of yarn manufacturing equipment. spinning, winding, twisting 148
ITMA [1987] renovation with computers 4127
ITMA [1987]. double twisting, twist texturing, and fixing 4948
ITMA [1987]. short staple yarn manufacture 4924
ITMA [1987]. twisting developments 958
material flow. bobbin conveyor, transfer robot, and pin carriage from Saurer-Allma 5796
methods for polyester yarns on Hoechst spinners, production of two-ply polyester yarns 154
Murata's Twister 377, automated two-for-one twister. features, advantages 6597
Murata. profile of machinery 5783
new twist system for the PS-100 flax ring spinner, reduced tension and breakage 4129
nozzle and take-up device. proper twist control of cotton and viscose blends 153
patterning technologies for top, yarn spinning systems 8144
Plyfil. Suessen. various twisting processes 6596
ring twisting. effects of operating parameters 8203
Saurer-Allma FM-F combined hollow spindle ring fancy twisting machine 8193
Saurer-Allma Jantra two-for-one twister. production parameters, yarn quality 155
Saurer-Allma TM two-for-one twisting machine with robotic bobbin conveyance and driverless pin carriage transport 6598
Saurer-Allma's ESP spin twisters for novelty yarns 3363
spinning. cotton, dyed. BD-200-RTsE spinner, defect prevention, IN twist intensifier 144
Textima's 3008 and 3010 draw twisters 5756
twisting-stretching machines with rolls having ceramic coatings. change in temperature conditions of operation 4949
two-for-one twisters at Dundee plant. improved yarn quality and production 156
uptwister, Hamel 2000. combination-twisting 5797
yarn. developments, state-of-the-art, future trends. machinery and processes 957

TYPAR IS AN OLEFIN--POLYPROPYLENE FIBER.

ULTRASONICS
composites, carbon and silicon carbide, testing 1462
crack detection in graphite/aluminum composites 1463
device to join nylon 6 sliver, yarns during ring spinning 959
dye system accelerant 8538
F. Calemard's ultrasonic equipment for fusing, cutting, and laminating 5392
Moduli of PET and polystyrene composites compared 8675
PPTA fiber modified via ultrasonics. mechanical properties 7538
quilted nonwovens. ultrasonic bond 5994
sonic digitizer technique to measure medullation in mohair 8687
time-of-flight C-scanning to inspect composites used in aerospace 3830

UNDERWEAR, SEE APPAREL--UNDERWEAR.

UNIFORMITY (SEE ALSO OTHER HEADINGS SUCH AS DRAFTING MACHINERY, DRAWING MACHINERY)
drafting sliver. beta adjustment technique 8158
evenness tester. Keisokki Model KET-80C unit 973
fabric. imitation model using scanner control 5518
importance of uniformity of yarn in materials to be garment dyed 8508
jute/polypropylene textured yarn properties 4142
nylon filament uniformity. affected by moisture content 905
unoriented monofilament diameter nonuniformity effects of stretch ratio and strength of final fiber 7337
yarn evenness tester Keisokki KET80. computer control 8701
yarn evenness tester. Keisokki Model KET-80B unit 974
yarn irregularity. effect of air pressure from rotor cleaning device 2513

UPHOLSTERY, SEE AUTOMOTIVE FABRICS, FABRIC PRODUCTS, HOME FURNISHINGS.

VELANA IS A POLYESTER FIBER.

VELCRO, SEE FASTENERS AND TRIMMINGS.

VELOURS, SEE PILE FABRICS.

VELVET, SEE PILE FABRICS

VELVETEEN, SEE PILE FABRICS.

VELVETEX, SEE FLOCKING.

VENTILATION, SEE AIR CONDITIONING, ASBESTOS, DUST, ENVIRONMENT, MILL BUILDINGS.

VEREL IS A MODACRYLIC FIBER.

VINAL FIBERS
ion-exchange fibers, bonding, sorption of insulin molecules, tests 5679
Kuraray and Unitaka to commercialize vinylon fiber. applications 5719
polyvinyl alcohol fiber with increased elasticity from Yamanashi University 7356
polyvinyl alcohol fibers produced by zone drawing of dried gels. tensile strength measurements 2491

VINOL IS A VINAL FIBER.

VINYL FIBERS, SEE VINAL FIBERS, VINYON FIBERS.

VINYLON IS A VINAL FIBER.

VINYON FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS INDUSTRIAL HEALTH AND SAFETY, LEGISLATION)
polyvinyl chloride plastisols. rheological properties 3305
polyvinyl chloride, flexible with closed pores 1851
polyvinyl chloride. extrusion solution effects on preparation process 8073
properties, applications in nonwovens and filters 6042
Rhovyl from Rhone Poulenc. chloro-fiber for apparel 6550
wastes, polyvinyl chloride, spinning process 4024

VIRUSES, SEE ANTIBACTERIAL AGENTS, DRYCLEANING, GERMPROOFING, INDUSTRIAL HEALTH AND SAFETY, LAUNDERING.

VISCOSE
alkaline earth metals and iron salts. effect on physical and chemical indices of viscose 92
Celica. viscose production process eliminates old difficulties 91
concentrated viscoses. physicochemical properties 4889
contaminants. use of EDTA solution for removal of contaminants on quartz sand filter bed 757
deaeration. prototype unit for viscose 93
degeneration, preheating viscose before. experimental apparatus 94
double strand extrusion scheme 8077
fiber waste from viscose manufacturing. effect of textile auxiliaries on bulk density and water vapor sorption of cellulose powder 95
flammability testing standards. need to upgrade to make test results more relevant 8719
frame filter press for bubble wash-out of viscose waste from filter elements 5542
gel particle content. FS-112 analyzer 5449

highly concentrated viscose yarns. effect of precipitation bath on primary swelling 7327
lead content in viscose precipitation baths. polarographic determination 5450
Lenzing 1.0-dtex Modal viscose and carding, spinning behavior 3325
polyethylene glycol as viscose regeneration retardant. influence of molecular weight 8070
rayon grade dissolving pulp, processing 8079
regenerated cellulose. dynamic viscoelastic properties measured isothermally as a function of relative humidity 2492
regeneration retardants. effect of sulfur by-products in viscose 8134
stretching forces in various stretching devices. mathematical expressions. stretching schemes compared 96
viscose manufacture. plasticizing bath corrosive activity. effect of temperature and bath composition 3268
waste recovery. zinc regenerated from wash water during viscose manufacture 101
wood pulp properties. effect on viscose process and fiber characteristics 3313

VISCOSE FABRICS
behavior of Lenzing Modal viscose, alone and with cotton, in dyeing and finishing 3316
finishing. microstructure and chemical aftertreatment 5113
linings. improvement by different weaves, N-methylol finishing 8359
polynosic fabrics and blends, shape retention 7513
printing with ethone 5285
rayon, rising popularity. developments in rayon blends. discussion with BASF executives 2421
scarves, challis. tremendous increase in popularity 2123
shrinkproofing viscose rayon weaves, resin finishing 1976
surface morphology. effects of sunlight exposure 1895
viscose woven fabrics. treatment with DMDHEU. effect on physico-mechanical properties 4496
wet printing methods, recipes 3642

VISCOSE FIBERS (SEE ALSO OTHER HEADINGS, SUCH AS HIGH MODULUS FIBERS)
absorbent. nonabsorbent. superabsorbent. end uses 2487
acid solutions used in manufacture. application of mathematical experiment planning to study metal-solution system 97
aluminum sulfate content of precipitation bath at high modulus viscose. effect on fiber properties 3264
Avtex closes, claims high cost of pulp as reason 8789
behavior of Lenzing Modal viscose, alone and with cotton, in dyeing and finishing 3316
carbon black incorporated into viscose fibers. as black pigment, as electrical conductive materia 3317
carbon fiber precursor. sulfuric acid/urea pretreatment 8028
Cellca fibers from Neste. production and properties 4039
cellulose fibers. X-ray orientation profiles. changes due to swelling and stretching treatments 5604
cotton, polyester and viscose fine-titer yarns. performance in fabric production 3407
flame retardant Viscose FR from Lenzing. applications 98
gamma cellulose content increased in viscose fibers resulted in high reactivity and uniformity 4890
graft polymerization of viscose to cellulose during spinning. anion-exchange properties 99
heat of moisture sorption measured by heat transfer calorimeter 1446
Lenzing 1.0-dtex Modal viscose and carding, spinning behavior 3325
Lenzing viscose fibers incorporating carbon 3315
Lenzing's high performance fiber range. improved viscose rayon staple 885
Lenzing's viscose rayon fibers with carbon, Viscostat and Viscocarbon 3314
modification of fibers for nonwoven fabric production. friction, absorption, resistance to sterilization 100
moisture measurement. BTRA CM-1 and VM-1 portable testers 8683
nonwovens. growth in industrial applications 4292
nonwovens. spin finishes effect on absorbency properties 1158
polyester/viscose blend yarns evaluated 6611
production and properties 877
production, threats to rayon and acetate. impact on apparel and textile industries. polyesters as alternative 4051
rayon staple. domestic shipments increased for [1987] by six percent 894
rayon used in thermal bonded constructions 3542
rayon. men's hosiery and underwear. rising popularity 2535
rotor-spun viscose fiber. effect of spinning on fiber configuration 8694
Siblon. water vapor sorption 4839
solutions, highly concentrated. radiation treatment to reduce viscosity 4891
speed of carding process and relation to fiber breakage. results for wool, viscose fibers 6561
staple fibers crosslinked with DMDHEU compared with conventional viscose fibers 922
tenacity of Modal viscose/cotton blend yarns in fine weights in circular knit fabric constructions 3397
varieties in development. quality control. production by Viscose Europe 4294
viscose. effect of sulfur by-products on regeneration retardants 8134
Viscostat. viscose fiber containing carbon with anti-static properties 6555
water retaining properties of viscose fibers in knit fabrics 1685
Western European viscose fiber producers. types of viscose rayon produced 5720
wood pulp properties. effect on viscose process and fiber characteristics 3313

VISCOSE YARN (SEE ALSO OTHER HEADINGS, SUCH AS TIRE CORD)
air jet versus ring spun, properties, uses 4143
breaking strength and extension in acrylic blends 5811
carboxymethylated viscose yarn, twist effect on properties 4974
defects in structural organization in viscose 8225
drying, heat energy expenditure measured by thermogravimetric analysis 4918
highly concentrated viscose yarn. structural properties 7328
length variation allowable for rotor spinning 4943
rayon yarn cakes. defects, causes, cures. guidelines for production 6551
Sirospun yarns. wicking measurements from viscose series 5818
soft paraffin yarn treatment. abrasion resistance and friction 4965
spinning from coarser rovings 6585
spinning, open end. fiber length and yarn quality 6591
steam-relaxation treatment of acrylic blends 6078
viscose/polyamide looped yarns. effect on hygienic properties of fabric 320
yarns from Baikal celluloses. preparation 4975

VNIIVLON IS A MANMADE FIBER.

WADDINGS, SEE BATTINGS, NONWOVEN FABRICS.

WALL COVERINGS, SEE CARPETS, FABRIC PRODUCTS, HOME FURNISHINGS, FLOCKING, PAPER.

WARP KNIT FABRICS, SEE KNIT FABRICS--WARP.

WARP KNITTING, SEE KNITTING--WARP.

WARP PREPARATION (SEE ALSO OTHER HEADINGS, SUCH AS SIZING, SIZING AGENTS, SIZING MACHINERY, SLASHING, SLASHING MACHINERY, WARPING, WARPING MACHINERY, WINDING, WINDING MACHINERY)

Benninger thread tensioner model UZ for beaming of yarn from parallel creel 5846
Benninger. direct beamers Type ZC-R 8234
breakage in warps predicted by mathematical modeling 3826
defects in yarn cause defects during weaving. prevention 4983
Fischer-Poege weaving preparation machinery 6632
IMB. progress in drawing-in technology. trend toward pragmatism 6975
Industrial Precision Ltd.'s Swet Rod applicator for warp beam lubrication 3410
ITMA [1987], microprocessor control and programming 5001
ITMA [1987]. drawing-in and warp tying machines 1736
ITMA [1987]. warp preparation 1737
laoding unit PL 40 from Karl Mayer for heavier yarn packages 5823
lubrication of warp yarns as replacement for sizing 7371
Mayer's ZM(Z)G warping system for high tenacity yarns 989
performance correlation through testing with A-C Eurotech abrader 3820
quality improvement. systems of preparation. yarns chosen 6665
radio frequency drying polyester/cotton warp yarn in sizing process 5837
rugs. Navajo. winding, twining, binding, warp 1011
size formula preparation, yarn creeling, size box slasher, quality control 1741
sizing degree, controlling warp. liquor uptake. devices from Pleva, Sucker and Mueller 4162
sizing with foams 3414
two tier carriage creel, GW 2/2, from Mayer. specifications 990
warp-drawing. performance and costs 8242
waxing with surfactants to reduce friction 3418

WARP-DRAWING, SEE YARN PROCESSING--FILAMENT YARNS.

WARPING (SEE ALSO OTHER HEADINGS, SUCH AS SIZING, WARP PREPARATION)
beam warping. narrow quality tolerances. Mayer's DS 42/35 NC beam warping system 5830
Benninger tensioners with autom..ic section tension control. UZ type 7403
Benninger. thread tensioners and traveling blowers and cutters for high speed warping machines 8243
breakage in warps predicted by mathematical modeling 3826
conveyor belts, procedure and machinery 186
draw-warp-sizing process. Mayer-Sucker + Mueller unit 5835
draw-warping installation from Barmag and Liba 6635
drawing-in. new techniques seen at IMB. trend toward pragmatism 6975
ITMA [1987]. advances in warping and warp preparation 5023
ITMA [1987]. sectional and fractional warpers. draw warping. developments 7410
Karl Mayer develops ZM(Z)G warping system for high-tenacity yarns 8244
let-off, electronic and mechanical warp. whiproll dynamics. filament yarns 4175
multi-beaming techniques. product development 8233
proper warping, weft preparation, shuttleless weaving for open end yarns, fabric quality standards 4171
sample. Hollingsworth's MS 6.540 warp sampling machine 5850
sample. Hollingsworth's MSL-Universal 6.541 automatic warp sampling machine 5849
soction tension control for section warping. Benninger 4168
Sharp PC 1246 S mini pocket computer. warping and beaming 5503
spliced yarn. performance in warping and weaving 983
standard warps increase productivity and decreases costs in weaving 991
Sucker and Mueller's warp preparation system. reasons for investment in a system 7878
tension control with ENP electromagnetic device. mathematical analysis 187
tension in balloon, equations based on data for warping procedure 5002
warp drawing process for flat filament yarns 4993
winding warp yarn equally onto rollers 4169

WARPING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS BEAMS, CREELS, SLASHING MACHINERY)
automated warping plant processes through robots and remote control 3135
automatic. UC and A-3 from Valentin Rius Clapers 5824
Barber-Colman. Model MPB warper 5847
beam warping. narrow quality tolerances. Mayer's DS 42/35 NC beam warping system 5830
Benninger warping machine used at Simba towel manufacturing plant 5490
Benninger's ZDA and ZDAk direct beamers 5827
Benninger. thread tensioners and traveling blowers and cutters for high speed warping machines 8243
computer control for warper, angle of spindle rotation, brakes 4170
direct and traverse motion. Valentin Rius Clapers 5825
draw-warping installation from Barmag and Liba 6635
DS-NC computer controlled direct warping machine and creel 3412
efficiency. parameters influencing efficiency 5003
electronic control. ITMA [1987] exhibits of yarn tensioning devices 6636
Hacoba model GRS unrolling creels for tape material 5831
Hacoba model NHZ automatic direct warper 5848
high speed beaming machinery type MZD. pressure roller system 188
Hollingsworth's MS 6.540 warp sampling machine 5850
Hollingsworth's MSL-Universal 6.541 automatic warp sampling machine 5849
interweaving of warp threads in selvages, computerized control 1767
ITMA [1987]. developments in spinning technology 8179
ITMA [1987]. warp preparation 1737
ITMA [1987]. warping, sizing, and warp preparatory processing machinery 6628
ITMA [1987]. weaving preparation 5856
Karl Mayer develops ZM(Z)G warping system for high-tenacity yarns 8244
Karl Mayer's direct warping units, type DS 5832
Karl Mayer's DS 65/40 direct warping installation 5833
Karl Mayer. draw-warping and sizing system 5836
KFW1250 and 2450 from Grob 8269
Liba. product line catalog 5851
Mayer's warp-drawing machine. draw-warp-sizing 6631
Mayer's ZM(Z)G warping system. high tenacity yarns 5852
McCoy-Ellison develops draw-warping system 8236
polyester yarn beams, fully oriented. Karl Mayer draw-warper 8247
Reed-Chatwood UW warper and UW beamer 5853
Rotal's R.S. 1000 direct warping machine 5854
section warper, Benninger Supertronic 992
section warping, Supertronic. from Benninger 4161
sectional, measuring warp ends and tension. Benninger Supertronic 3420
sectional. Hacoba, technology. comparison of old and new methods 3409
Sucker + Mueller's WR-M and WR-C beamers 5828
Supertronic cone sectional warping machine from Benninger 6633
Supertronic section warper from Benninger 5855
Supertronic warper by Benninger. warp setting attachment 6666
tensioners, controllable. Benninger 4168
traverse motion and direct. Valentin Rius Clapers 5825
USK-toptronic from Hacoba. machine features, operations 8245
USK-toptronic. Hacoba 6634 8246
warp-draw-sizing and warp-draw systems from Val Lesina 189
warping creels manufactured by Benninger. tension control devices 3413
West Point Foundry and Machine Company's Electrosense warping creel yarn break detection system 3419

WASH-WEAR (SEE ALSO OTHER HEADINGS, SUCH AS CREASES AND CREASE RECOVERY, CREASING AND PLEATING, CROSSLINKING, DURABLE PRESS, RESIN FINISHING)
Ciba-Geigy's Braxan WF polyurethane finish for non-felting and washability in wool fabrics 2786

WASHFASTNESS (SEE ALSO OTHER HEADINGS, SUCH AS COLORFASTNESS)
acid dyes. absorption spectrum, lightfastness, conditions for true color 2767
cotton fabric dyed with disperse dyes and treated with resin 1216
fabric finishing. polymer coatings produce thermally active fabrics. changes in cellulose after treatment 7642
GSCP as thickener for disperse dye printing 7635
GSCP thickener/sodium alginate in printing with reactive dyes 7632
improved. fiber modification through use of acrylic emulsions 6152
reactant fixable dyes on cotton fabric. fastness properties 8488
reactant fixable dyestuffs for better washfastness 8431
shrinkage. knit fabrics. Sanfor process, problems and solutions 6161
silk and wool. SW and WW marks by Ratti. washable to 40 degrees Centigrade 8428
tetrabromidephthalic anhydride, resistant to washing, drycleaning, uses 5301
uniform fabrics. colorfastness tests. soiling and soil removal tests 6758
vat dyed cotton/polyester knit fabrics, effects of shrinkproofing on dyefastness 6944
washability tests from International Wool Secretariat 7086
wool prints, multicolor, for apparel. machine washable 1250
wool. improved washability and colorfastness with a new amino compound 6853

WASHING (SEE ALSO OTHER HEADINGS, SUCH AS DETERGENTS, LAUNDERING, SCOURING, SOILING, WASHING MACHINERY)
activity of surfactants in under various conditions 6220
cellulase in fabric washing compositions 7717
continuous afterwashing of printed fabrics. objectives. machinery 7650
cotton fibers. distinguishing washed and unwashed fibers with thermogravimetric analysis 8155
dyeing, washing wastewater, cobalt level measurement 5555
foam washing of clothes, effect on air flow rate on detergency and cleaning ability. study 7011
garment washing techniques, procedures for stone washing with and without chlorine, and ice washing 2083
mat processing at Industrial Towel and Uniform. washer, dryer, roller, and tying operation in one unit 6992
printed cotton fabrics, washing parameters, dependence on dye type 5310
reduction in washing time due to benzyl alcohol treatment of cotton wovens 5309
Rongalite during washing after printing acetate knit fabrics, effect on colorfastness 5192
stain removal. several methods 2869
stonewashing denim. advantages of drystone method over aqueous method 393
tension levels affect shrinkage and dye desorption, tests on fabric structure and fiber content 5311
Tkanol washing agent with surfactants for oil spot removal 5308
turbidity behavior of nonionic tensides. additives 488
uniform fabrics. colorfastness tests. soiling and soil removal tests 6758
vacuum slots for washing ranges developed by TEV. manual and automated adjustment 5314
washing simulator, dye resistance tester 4682
wearer comfort of knits and cumulative effects of soiling and washing 6790
wool. washable in machine 6807

WASHING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS FINISHING MACHINERY, SCOURING MACHINERY)
Aquatex washbox from Mather. continuous open width fabric processing 2719
Babcock Econ-Tex open width washer discussed at recent symposium 5312
batch tunnel washer and washer extractor compared for operating costs 4595
closed washing cycle for work apparel. recycling energy and materials 3743
continuous afterwashing of printed fabrics. objectives. machinery 7650
continuous processes for knit fabrics 7561
Convitex and Hydrotex ARTOS units by Klopman. summary 6362
Desmond and Sons purpose-built denim processing plant. Washex 48/40 stone washing machines 4481
garment dyeing with pigment colors. technology to dye anything anywhere. rotary washing used, dyeing process 5250
ITMA [1987]. equipment for knit fabric finishing 7562
ITMA [1987]. pretreatment systems 4409
LPS-140-10 washing line for cotton fabrics, energy saving system 5313
mat processing at Industrial Towel and Uniform. washer, dryer, roller, and tying operation in one unit 6992
Model LC Two Flow continuous rope washing machine from Brazzoli 5237
open width and rope form processing. different machines 4498
Ramisch Kleinewefers' redesigned Supra-Nova washer series 3667
rental operators convert to continuous batch washers 4596
sample washing machines, requirements. examples 6222
Ultra continuous batch washing machine for small laundries from Poensgen and Sulzmann 2870
vacuum slots for washing ranges developed by TEV. manual and automated adjustment 5314
washer/extractor for stonewashing, from Cherry Tree 1257

WASTE--FIBROUS (SEE ALSO OTHER HEADINGS, SUCH AS CLEANING OF MACHINERY, DUST, AND UNDER SUBJECT HEADINGS OF SPECIFIC MACHINERY AND PROCESSES)
aerodynamic design, waste removal devices for rotor spinners 4104
biogas from willow dust. plant studies 3929
biogas plant for using willow dust and other textile waste. CTRL design 3930
biogas production from willow dust by dry anaerobic 3931
carpets, latex-backed. waste used in heat insulation plates 8400
Central Research Institute for Wool's ART-120-Sh picker, UO-Sh waste cleaner 4915
comb bar improves blowroom action. BTRA 8153
composite pressed nonwovens. acoustic insulation from fiber wastes 4374
cotton and cotton system wastes. blending, roving, open end spinning, yarn uses 4097
cotton combing waste, processing in preparation for rotor spinning 124
cotton combing wastes, rotor spinning into knitting yarns 157
cotton dust, computer simulation 7176
cotton fluff accumulation in clearers. acid removal 8143
cotton, cotton system waste in open end spun yarns, seven yarn evaluations 4100
cotton, lower grades. processing and spinning on modern equipment 4806
cotton. processing short staple cotton waste at Kispesti Textile Factory 4950
depolyamidation of polyamide waste. corrosivity of technological media with phosphoric acid hydrates as catalyst 3286
dust, lint. Luwa APF filtering system for textile plants. air filter, emission removal 4753
fiber damage during opening reduced using new arrangement of pins in tearing cylinder 1692
fiber waste from viscose manufacturing. effect of textile auxiliaries

on bulk density and water vapor sorption of cellulose powder 95
garbage disposal. laws and provisions concerning 6379
greenhouse heating mats of warp knitted hollow fibers 3535
hydrolysis. auxiliaries for reducing cellulose powder agglomeration 3565
incineration as a viable treatment method (Conf. Paper) 8849
ITMA [1987]. extraction trends 1526
Itma [1987]. nonwoven fabric manufacture 5970
Kaeiln fan nozzle fabric cleaning system removes dust, lint, fiber fragments 2721
Kemafil process recycles products for industrial applications 3551
knitting fiber wastes in outerwear batting 8344
knitting. formation and removal 5053
Laroche. wool waste recycling machinery 1694
LT-2000 nonwoven production line and use of wastes 4275
Luwa automatic panel filter for spinning and weaving mills and final filtration in textile waste removal 3136
Martin Worldwide's Model 6000 Bobbin Stripping Machine 2299
Mayer Coner waste yarn cheese winder 3421
natural wastes and polyetherurethane for leather substitutes 5143
needlepunched geotextiles from synthetic fiber wastes 2677
nonwoven geotextiles produced from wastes. fabric properties 1068
Pallman Maschinenfabrik manufactures Series PFV Plast-Agglomerators to recycle thermoplastic wastes 3956
plastics recycling research, pilot plant at Rutgers University sponsored by The Center for Plastics Recycling Research 2320
pneumotransporter, burning fiber waste, prevention, analysis of fire source 5524
polyester and acrylic waste converted into utility products for textile applications 7199
polyester depolymerized for possible use as resin showed no film forming properties 6536
reclaimed wool industry in England hurt by dollar and consumer demand for lightweight wool 1623
recycling textile wastes [since 1981], achievements, new challenges 758
recycling. pin arrangement from H. Schirp in tearing cylinder to cut down fiber waste during opening 3326
reject handling in secondary fiber systems. handling, compaction, dewatering 6382
RORA produces machine line for processing textile wastes 3334
rotor spinning fabric wastes, re-use and processing methods and machinery 104
rotor spinning of cotton and cotton waste yarns 4933
sewing threads produced from fiber processing wastes. spinning, suitability 158
Soviet cotton waste standards, released [January 1987] 4012
Soviet processing mills. modernization of inferior machinery 4807
spinning, polyvinyl chloride 4024
synthetic fiber waste used in medical and geotextile fields. technology, methods 3543
Team-tex uses residual yarn automatic cone winder from Karl Mayer to rewind waste thread 8195
testing technologies from Agricultural Research Service 7061
yarn left on bobbin carriers. Martin Worldwide's bobbin stripping machine 3344

WASTE TREATMENT--EFFLUENT (SEE ALSO OTHER HEADINGS, SUCH AS AIR POLLUTION, DETERGENTS, ENVIRONMENT, SURFACE ACTIVE AGENTS, WATER)
alkaline waste water neutralization with flue gas 2322
azo dyes. EPA testing of C.I. Disperse Blue 79. biological wastewater treatment systems 7907
bacterial degradation of water from silk and ramie mill 2318
canalization, water conservation, automated sampling system 5554
carbon dioxide found safer than sulfuric-acid at Greenwood Mills 8912
caustic soda recycling in dyeing, finishing (Conf. Paper) 8851
chlorite bleaching wastewater to treat dyeing wastewater 759
closed loop recycling system using ultrafiltration to separate polymer sizing and purity effluent 8445
color removal from dyehouse effluent. anion exchangeable cotton yarn 760
coloration measurement and turbidity influence 4689
comparison of wastewater treatment equipment manufacturers and their systems 2323
control in dyeing procedures results in reduced costs 3596
cotton finishing, reuse of wastewater's heat, method 5529
cotton processing waste water purification, reuse in industry, parameters. biological and chemical cleaning 4760
CSIRO Lo-Flo scouring process and modified liquor flow pattern 4094
decolorization of effluent. flocculating agents 7200
dioxide molecules in steam used to neutralize alkaline in waste water from cotton finishing 4761
disperse azo dye wastewater toxicity reduced 7909
Disperse Blue 79 degradation in the waste activated sludge process 7905
drycleaning. Buse System. acidification of alkaline wastewater from drycleaners 4762
dye wastes entering landfill via sludge from biological treatment plants 7911
dye wastes removed via electrochemical cell. chemistry, costs. pilot studies 7910
dyehouse effluent heat recovery. problems with heat recovery systems 3946
dyeing and finishing wastes. storage, buffering, detoxifying of effluents 3144
dyeing, washing wastewater, cobalt level measurement 5555
dyeing. reducing costs. optimum use of chemicals reduces pollutants in effluent 7583
effluent load reductions, other benefits from changes in dye and dye intermediate manufactures 7912
electrochemical wastewater treatment with ferrous hydroxide, results 7920
emissions control, cost effective. batch dyeing and finishing equipment at ITMA [1987] 4398
field trials in two industrial laundry wastewater pretreatment systems 3145
finishing processes. costs of water recycling 3957
finishing wastewater. conversion device to reuse heat for dyeing 5272
flue gas as neutralizing agent for wastewater, advantages over mineral acids 5556
garment dyeing. filtering and removing stone residue from wastewater 8509
geomembranes used in heap leaching 1130
geotextile membranes. impoundment for wastewater generated by olive processing 1541
guidelines for pollution control 7201
hydrogenation of fluorosludge from knit fabric finishing, vacuum filtration method 761
Japanese wastewater treatment systems at twelve industrial facilities 7919
kinetic analysis, effectiveness, influence of costs of dioxide neutralization of alkaline waste water from cotton finishing 4763
magnesium hydroxide, magnesium oxide and calcium carbonate recovered from wastewater 7202
microbiology test methods 1464
Mirafi 500 polypropylene lines oxidation lagoon in Louisiana for treatment of wastewater 7762
nickel cations in wastewater from manufacture of electrically conducting fibers. ion-exchange method of purification 5557
nonionic surface active agents. wastewater cleanup with foam separation flotation method 8913
ozone and radiation to acidify alkaline finishing waste water for reuse, effectiveness 4764
Pakistan. pollution from textile wet processing industry 6378
pilot plant for removing contaminants from spent mercerizing liquor 7103
pollution standards, West German, create problems for launderers and drycleaners 3950
polyethylene terephthalate production 5705

printing and finishing operations, energy conservation, effluent control 6819
recovery and recycling of textile chemicals. recycled effluent 7555
reduction of disperse azo dyes in bottom sediments in the environment. potential hazards 7914
reusing heat energy from dyeing waste water 4735
sodium dilithionate as decolorizing agent in dye process wastewater 7179
sodium hydroxide solutions. recycling via membrane filtration 4765
sodium hydroxide. recovery and reuse 4766
solvent scouring/aqueous carbonizing machine tested by Bianchi in Italy 6828
solvents, effects West German environmental laws on the industry. recycling developing less harmful solvents 4755
sorption isotherms. azo dye fate predictors in activated sludge wastewater treatment process 7915
test to determine amount of oxyethylated alkylphenol in dye waste water 4767
testing procedures. India. effluent sampling 3958
ultra-filtration for a uniform rental company. complying with federal standards 2324
viscose production, zinc extraction from wash water. two stage process 101
wastewater neutralization using flue gas method. disadvantages of using mineral acids 2325
West Germany, postwar textile developments. VTCC fortieth birthday 6419
West Germany. regulating solvents and other chemicals used in drycleaning 3949
Western Uniform utilizes Memtek Corporation's wastewater treatment system 2321
wet processing. strategies to reduce pollution sources and improve costs and quality 3959
wool scouring processes. developments over forty years 4010
wool scouring processes. production of minimum or zero effluent 4022
wool scouring. dynamic membrane treatment 4768

WATER (SEE ALSO OTHER HEADINGS, SUCH AS ENVIRONMENT, WASTE TREATMENT--EFFLUENT)
acrylic fibers. water content and glass transition temperatures 3248
azo dyes. EPA testing of C.I. Disperse Blue 79. biological wastewater treatment systems 7907
canalization, water conservation, automated sampling system 5554
chemical processing in India 5161
cochineal-dyed wool. effects of traces of calcium and magnesium ions in water 7626
consumption. West German household water law and finishing industry 6832
dip dyeing. reduced water consumption 5212
dye wastes entering landfill via sludge from biological treatment plants 7911
dye wastes removed via electrochemical cell. chemistry, costs. pilot studies 7910
dyeing behavior modified by water. ionic and non-ionic interactions in aqueous solutions 416
dyeing, exhaust. reduced consumption 437
dyeing, vat, combined with mercerization saves on water use 5163
extraction of water from textiles before drying. mechanical methods 6961
finishing cotton, flax, and blend fabrics, LZO production line 5172
geocomposite drains. testing, comparing products 7831
geotextiles used in water engineering 302
hydrostatic pressure and water absorption 7511
Kevlar 49 fibers. diffuse reflectance Fourier infrared spectroscopy used to determine water absorption 7298
Novatherm Klimageraete humidity control systems to maintain textile quality 3935
purification of water in dyeing operations. tests and results 6383
quality or unrefined water in printing houses. pollution levels and their treatment 7203
quality testing in New Zealand for water supplying CHEMSET machines 8743
reduction of disperse azo dyes in bottom sediments in the environment. potential hazards 7914
reservoir membrane liner in Cincinnati Water Works 8666
sorption isotherms. azo dye fate predictors in activated sludge wastewater treatment process 7915
textile chemical processing. water management 8446
vapor transmission through fabric 8732
vapor transport. mechanism. monolithic breathable barrier films 6055
vapor-phase and liquid-phase grafting to hollow-fiber membrane. effect on water permeability 3485
wastewater from finishing processes. costs 3957
water conductivity of geotextiles. permeability coefficient versus hydraulic loss discharge 7093
water retention due to humidity and temperature. conditioned weight of textiles 7818

WATER POLLUTION, SEE ENVIRONMENT, WASTE TREATMENT--EFFLUENT, WATER.

WATER RESISTANCE
apparatus used to measure water vapor resistance of coated and uncoated fabrics compared 3062
fabric surface ribs. effect on water repellency 1896
fabrics. main producers and their trade names 6077
N-methylol melamine resin with inorganic salts and silicone resins to impart flame, water and rot resistance 1258
oil absorbent, water resistant fabric developed by Societe Industrielle des Camis 1885
polyamide carrier fabrics for Polish lifeboats 1766
rainwear. waterproof and vapor permeability of fabrics on the market 7721
repellency in relation to ribbed surface structure of fabric 6806
ultra-water repellent ski-wear fabric. Super-Loecks from Asahikasei 8430

WATER-REPELLING, SEE WATERPROOFING.

WATERPROOFING
Czechoslovakian tests and methods on foam finishing. coating, carbonization, waterproofing 4394
fabrics, waterproofed. attaching adhesive nonwovens 8617
Favor-C polymers from Chemische Fabrik Stockhausen 7043
Japanese companies produce fabrics for skiing 6804
knit 1/slip 1 stitch sequence results in weatherproof fabric 7435
Persistol E/8-oxyquinolinate copper, germ, waterproofing 5302
Sunbeam microprocess membrane coated fabric. low cost alternative to Gore-Tex 8540
Sympatex breathable, waterproof polyester membrane from Akzo 8425
Trevira Finesse high tech fabric from Hoechst. water impermeable qualities with no coating 6070
types for waterproofed apparel, ensuring watertightness 5384
types of finishes, differences, application, quality 5315
water repellent finishing, doubling, effects on fabric properties 6026
Wetsafe waterproofed terry toweling with a PVC resin backing 1434
wool fabrics. water and oil repellent finishing 1979

WATERPROOFING AGENTS (SEE ALSO OTHER HEADINGS, SUCH AS OIL AND WATER REPELLENT FINISHES)
Persistol E/8-oxyquinolinate copper, germ, waterproofing 5302
solvent system, Antrasol. Antarco 6131

WAXING, SEE APPLICATORS, CHEMICAL AIDS TO PROCESSING.

WEAR (SEE ALSO OTHER HEADINGS, SUCH AS ABRASION, DETERIORATION OF MATERIALS, AND UNDER SUBJECT HEADINGS OF SPECIFIC PRODUCTS, SUCH AS APPAREL, FABRICS, ETC.)
carpet pile layer related to fiber fineness and wear properties. wool

and polyamide fiber constructions 5442
carpet yarns. Stainmaster program by Du Pont 1419
coating rotors with aluminum oxide to increase work life of PW-11 and PW-12 spinners 4123
construction and durability of carpet pile. effects of denier 6645
copolyester textured yarns compared to polyester for extension stress 8112
cotton underwear fabrics, wear testing method 308
crosslinked polyethylene glycol bonded to fabric. absorbency and wear 4299
durability, effects of processing on wear 6791
fabrics, durability studies. literature review. abrasion resistance, tear and breaking strength 8385
increasing component work life with lasers, coatings, facing 4749
knitting elements. contribution of various fibers 4264
Martindale apparatus from James H. Heal and Co. tests flat woven and knit fabrics and nonwovens 5465
needle deterioration and relation to open end cotton yarn properties 4222
polyamide-imide and polyphenylene sulfide reinforced with short carbon fiber. wear rates and friction mechanisms 6543
polymer composites. sliding and abrasive wear 7825
polypropylene. uses in the home. wear resistance 3549
radionuclide measurement of knitting machine component wear 3863
ramie fabric. wearability study 2696
reduction on picking mechanism. polynomial for motion pattern selection 8267
research into wear and interaction of fiber fineness, construction of velour carpets 6715
short aramid fiber reinforced thermoplastic composites. improved wear resistance 2643
spandex. durability of hand 6748
spinning and twisting rings. method for accurate determination of wear 135
studies on apparel 6754
uniform fabrics. wear index and relative economics after repeated launderings 7518
wearer comfort of knits and cumulative effects of soiling and washing 6790
wool fabric ageing in actual garment wear 673
woven fabric quality appraisal. important factors 3063

WEATHERING (SEE ALSO OTHER HEADINGS, SUCH AS DISCOLORATION, PHOTOCHEMICAL DEGRADATION, ROTPROOFING)
cotton Kevlar 29 canvas fabrics treated with titanium dioxide and a fluorocarbon. weather resistance 2782
test methods outlined 4692
viscose fabric surface. effects of sunlight exposure 1895

WEAVES, SEE FABRIC DESIGN.

WEAVING (SEE ALSO OTHER HEADINGS, SUCH AS CARPET LOOMS, CARPETS, FABRIC DEFECTS, FABRIC DESIGN, LOOMS, LOOMS--SHUTTLELESS, NARROW FABRIC LOOMS, PICKING AND PICKER STICKS--WEAVING, PILE FABRICS, SELVAGES, SHUTTLES, TENSION, TIME STUDY, WARP PREPARATION, WEFT MECHANISMS)
adhesive force, size composition in relation 1768
air jet L5100 loom from Sulzer Ruti 3444
air jet loom designed on basis of shuttle loom for silk 1770
air jet looms, picking time versus air consumption 1769
air jet looms. automated weft break repair. [1987] ITMA 6671
air jet looms. weft and warp yarn loads 5891
air jet weaving. size formulations for different yarn types 2556
air jet. Lindauer Dornier Model DLW loom 8261
air jet. Picanol PAT-A loom with automatic weft break repair system PRA 1 subsystem 5881
analytic method to control raw material consumption, parameters 5039
artist. Janet Malotky produces woven images based on international symbols 8654
ATME-I [1988]. technological advances in weaving machinery from Picanol, Sulzer Rueti, and Pignone 5089
ATPR-100-2 rapier loom, warp regulator, continuous action, tested 208
automatic shuttle principles. weaving systems 1761
ball bearings on two beam looms, reduced tension unevenness, vibration, defects 4193
Barbara Jedermann's tapestries of groups of people and painterly methods of weaving 3782
beam, rotation angle shifts due to vibration on machinery. calculation, control 5026
Bolivian folk, Aymara and Quechua. motifs in wool. pattern worked in warp not weft 4638
Bonas CAPS 3 jacquard pattern preparation unit 5863
British weaving companies, recent machinery purchases and future plans for computerization 2587
BTRA performance standards on spinning and weaving 7978
BUDA-FLAX. modernization of spinning, weaving, and finishing machinery 3872
CAD principles for dobby fabric weave 2588
CAD-CIM in weaving. developments for jacquard and dobby shown at [1987] ITMA 6647
CAD. improved creativity, product flexibility 8272
CAD/CAM systems for apparel manufacture 5375
carpet designs with two ground colors, arrangement of jacquards for 6644
carpet manufacture. ITMA [1987] trends 6249
Classimat faults. effects of faults and sizing on weaving performance 173
color-and-weave effect 7421
computer aided design system Jacquard-1, applications 5028
computer analysis to produce highest quality cotton fabrics on all loom types 4203
computer integrated manufacturing (Trade Lit.) 8816
computer integrated manufacturing and requirements for its success. applications 6329
computer integrated weaving with cloth beam handling and transport systems from Sulzer Ruti 3920
computer integrated weaving. cloth beam handling and transport system. robotics. automation 5027
computer programs at Graniteville, Woodville Mills 5009
Constant-Extra jacquard papers from Schroers 8273
control systems, computerized, from Barco, Zellweger-Uster, Computrol 8253
conveyor belts, procedure and machinery 186
costs. effects of different parameters. computer-assisted simulation 2241
costs. study of raw materials and energy involved in production 5892
cotton bedcover with eyelet construction on type 1515K loom 2592
cotton fabric from low density yarns on the ATPR-100-4 rapier loom 213
cotton open end and ring spun yarns on air jet loom. behavior in corduroy fabric 1012
cotton quality requirements. India 3203
cotton weft and warp yarn breakage on shuttleless looms. tension, yarn properties, tests 212
cotton yarn resistance along the back rest, lam, and heddles on the ATPR rapier loom 5029
cotton yarns sized with lignosulfonate for preparation on air jet looms 184
crimp, weft. factors influencing variations 6667
current technology, trends in weaving automation. weaving in the year [2000]. future trends 5893
cyclic diagram calculation, shed formation, heddle action 4204
Dan River, Cone Mills, and Fieldcrest Cannon mill executives discuss loom purchases 2589
deformation determination methods, comparison on rapier loom, tests 4205
design system for jacquard and warp knits. EAT Patro System 4206

Design-Scope pattern preparation station by EAT for dobby and jacquard weaving, jacquard warp knitting 4984
DesignScope computer workstation. EAT 6668
developments in loom engineering, weft insertion. future of increased automation 8277
dobby looms. patterning versatility in number of harnesses 6650
dobby. rotary. electronically controlled RD 800 from Fimtessile 5895
dobby. rotary. Model RD800 electronically controlled from Fimtessile 8275
drawing in. computer aided design for three-dimensional weaving effects 8256
East European textile machinery developments 7897
expert computer systems (Trade Lit.) 8817
fabric quality. control of variables which influence quality 5870
filament yarns in the shed, optimal number, formulas 214
filament yarns. behavior of on air jet looms. properties and requirements 8223
filament yarns. exceeding yarn strength results in breaks and overstretching 3454
filter panel, APF automatic. from Luwa 4737
flax rotor spun weft yarn breakage on the STB loom due to weft mechanism 215
flexible rapier loom model G 6100 from Sulzer Rueti 5875
formulas for woven fabric density with consideration for weave 216
Gottlieb-Daimler School in West Germany. journeyman and master candidate projects 4639
Grob's Sensitron. electronic thread breakage indicator linked with electrical warp stop motions 3446
Grob's warp stop motion machines 4200
Grobextra and Grobamextex heddles from Grob 8274
Grobextra and Grobamtex Alfix harnesses from Grob 4180
Grobtex and Grobtra leno heddles manufactured by Grob 3447
GTM loom by Picanol. automation and computerization. future in weaving 6641
harness influence on weaving and yarn stress 4216
harness. influence on weaving process and yarn stress 217
heddle position. influence on stitches in woven fabric 1771
high speed weaving. demands on smooth and textured filament yarns and wrapped yarns 5894
ikat. adapting and applying weaving techniques to hand knit products 1025
India [1987]. current state of powerloom, handloom, and composite mill sectors. performance 4155
India. acrylic fiber-based projects for rural economy 3400
India. status of machinery with respect to world development 7415
interactive computer construction of woven fabrics 3451
interference of shuttle upon entering or leaving shed 5030
interweaving of warp threads in selvages, computerized control 1767
ITMA [1987] exhibit highlights. weaving and preparation equipment 196
ITMA [1987]. auxiliary weaving equipment 1757
ITMA [1987]. CAD and CIM in weaving. possibilities and limitations 5864
ITMA [1987]. electronic jacquard looms. electromagnetic patterning elements 3450
ITMA [1987]. electronic technology 4723
ITMA [1987]. exhibitors. Italian and foreign 6420
ITMA [1987]. four wefts of different colors, other developments 5888
ITMA [1987]. French textile weavers' impressions of recent purchases 2590
ITMA [1987]. jacquard. development of electronics. innovations 7409
ITMA [1987]. Japanese developments. computer integrated machinery 8840
ITMA [1987]. loom accessories 5022
ITMA [1987]. loom developments. higher speeds, more electronic applications and controls, automation 1010
ITMA [1987]. looms and accessories 5867
ITMA [1987]. mechanical and electronic shedding motions, dobbies, and jacquards 5021
ITMA [1987]. mill executives South Carolina. discuss looms, their machinery needs 2583
ITMA [1987]. papers given at second MITEST. interlacing 6620
ITMA [1987]. shed formation highlights 1760
ITMA [1987]. technological advances in warp preparation. electronics, robotics, automation, speed, new materials 5023
ITMA [1987]. technology advances 999
ITMA [1987]. warp preparation 5001
ITMA [1987]. weaving and knitting technology trends 1730
ITMA [1987]. weaving machinery. development trends 5889
ITMA [1987]. weaving preparation, developments 5868
ITMA [1987]. weaving preparation. looms. trends. developments 3448
ITMA [1987]. weaving preparation 5856
ITMA [1987]. weaving techniques, electronic controls 5869
Jac-CAD 2000 from Grosse. design studio system for jacquard knitting and weaving 7141
jacquard fabric weaves. database using IBM-PC applications for production 5031
jacquard heads. electronic. increased flexibility and productivity in weaving 8278
jacquard loom, Verdol Aneares 250-FO. settings and adjustments 204
jacquard mechanisms with electronic control 2577
jacquard towel, automatic pattern weaving 219
jacquard weaving, interim color problems 218
jacquard. Jac-Art 2000 color graphics drafting system for fabric design 7142
Japanese weaving mills. production control system 7877
jute, problems in weaving. high speeds. Tegard 1001 machine by Gardella 6669
Kanebo, weaving pitch-derived carbon, high-strength polyethylene, polyfluorocarbon, quartz fibers. applications for the materials 210
KFW1250 and 2450 stop motion devices from Grob 8269
Knotex Plus drawing-in system with HIS shaft pre-selector 5890
Leno 2 circular loom from Starlinger and Company 5871
loom. evaluation for ability to manufacture fiber pre-forms for gas turbine engines 7412
looms. developmental trends. automation. success criteria in weaving 7413
M&S International design. Personal IGOS M&S CAD/CAM System for weaving and printing and carpet manufacture 8231
machinery, data sampling. techniques and hardware 4718
machinery. geometric principles and their applications 4158
Margarete Pfaff's architectural and abstract landscape weavings 4627
Master SM 93 model range of flexible rapier looms from Somet 5872
Mirobor manufactured by Grob. leno selvage device 3449
Missy Stevens, fiber artist, specializes in weaving cotton corduroy 1398
modified intermingled filaments. design, manufacture, and properties 220
monitoring weaving production with computer system 2289
monofilaments. technology and applications 8083
multifilament yarns. problems. solution proposed in rigid rapier loom by Dornier 6670
narrow band. European, African. Dreieichenhain historical exhibit. Eugenia loom 4177
Navajo rugs 1011
Nisshinbo California, spinning and weaving plant in Fresno, California 6344
nylon ribbon. tension levels, parameters 5033
open end spun yarns, general characteristics. Polish yarn quality, effects on weaving 4152
PA-250 device to separate warp yarns in loom, for cotton yarn weaving 4178
patterning system for jacquard. CAPS 3 computer design system 223
patterning, Jacquard textile. Jac-Art 2000 computer design system 221

patterning. interactive constructions of weave and color, using microcomputers 8254
patterning. starting allocations and box planning on 4x4 box looms 222
performance correlation through testing with A-C Eurotech abrader 3820
preparation. winding. modernization in weaving mills. factors affecting winding operation 8249
projectile. Model P7100 looms from Sulzer Rueti 8264
Prokostop 4408 computer controlled warp sheet monitoring device 8270
proper warping, weft preparation, shuttleless weaving for open end yarns, fabric quality standards 4171
rapier looms. multilevel shed dobby, parameters, calculating limitations 5032
rapier looms. Sulzer-Rueti G6100 type series. details 1003
rapier rigid. Dornier looms 5014
rapier, slay, excessive force on roller. ascertainment by computer program 4196
rapier. Dornier loom and varieties. problems with yarn 4199
rapier. double. Dornier machine for technical textiles 5013
rapier. dynamic motion. unfavorable influences 206
rapier. Model PM100 loom from Crippa Mario 8263
rapier. Picanol manufactures Pre-Winder Switch Off for automated weft repair on GTM looms (Trade Lit.) 8248
rapier. rigid. model H range from Lindauer Dornier 5880
rigid. rapier. Model VMe and VMm22 double velvet loom from van de Weile 8276
Schlafhorst's pneumatic knotless tying for warp yarns, effect on loom reed 211
selvage and temples. loom performance and cloth quality 6661
selvage floats. origins in warp handling and weaving technique 8255
selvages in shuttleless weaving. treatment in various articles 5886
Shaker rag rugs 5024
shawls. Russian. origins, technique, history 6962
shed control mechanism created by determining the beat-up force 225
shedding machinery. recent developments at Fimtessile. electronic control and programming 7408
shuttle-flight conditions, variation with loom speeds 1013
shuttleless weaving optimization. trends in rationalization 1764
shuttleless, rapier, and air jet, production increases on looms. reduced yarn breakage and labor time. data on cotton weaving 224
slashing, weaving cotton yarn, humidity and temperature parameters influenced by the size and drying process 4994
Soviet. automation and computer use 5025
spliced yarn. performance in warping and weaving 983
Staeubli Programming System 18 for dobbies and card cutting machines. portable programming device 18-58 II 8809
Staeubli Programming System 18 for dobbies and card cutting machines 8805 8807
Staeubli Programming System 18 for the dobby 2500 and 2600 Series 8806
Staeubli Programming System 19 for Jacquard machines. Jacomat software 8808
Staeubli's Type CF 420 and CR 520 Jacquard machines and card cutting machine Type 1866 and programming system 4201
Staeubli's Type CX 860 Jacquard machines with electronic controls 4202
standard warps increase productivity and decreases costs in weaving 991
stress damage to glass fabrics during weaving on Saurer 100 WJ loom 4207
Sulzer-Rueti exhibits ITMA [1987] 997
Sulzer-Ruti weaving machines at Simba towel manufacturing plant 5490
Supertronic warper by Benninger. warp setting attachment 6666
Swift Textiles, Thomaston Mills, Avondale Mills, and the Bibb Company, recent loom purchases 2591
take-up motion. BTRA modification. improved loom performance 3436
tapestries computer-aided, by Olivier Masson and Bernard Aujogue. Pointcarre CAD system. optical illusion or moire patterns 4635
tapestries of Elene Gamache 8657
tapestries, Anneke Hoeppener's wool gobelin 4634
tapestries, gobelin. Marlies Fraling's space suggesting landscapes 4637
tapestries. ten year retrospective of Annie Woywod's students. Museum Schools Rheydt 4636
tapestry weaving by Egyptian children 7407
tapestry. revival of Byelorussian gobelin tapestry. new techniques and themes 4633
tappet wheel on type 1515 loom. end product development 1005
tension caused by cotton yarn knots, factors, best knots for weaving 4209
tension levels on upper and lower shed axes. method causes yarn deformation 226
tension levels on warp and weft yarns 4208
tests on warp yarn reliability during weaving, formulaic analysis 4210
tests to determine optimal parameters for energy conservation. warp tension 4211
Texunion DMC, computerized 5504
triaxial weaving by fiber artist David Mooney 8326 8327
Viascan system for producing and processing color patterns for jacquard weaving. Viable Systems 8252
warp and weft tension on rapier and projectile looms. weaving speed 2586
warp breakage indicator from Textile Institute 8838
warp breakage rate. computation 8271
warp breakage rate. gray cotton yarn quality. formula for relationship 1014
warp preparation. improvement. new systems. yarns chosen 6665
warp tension uneven when shed open, tests, method to determine, prevention 4212
warp yarn behavior. German research 7401
warp yarn defects, tearing during weaving, causes, prevention 4983
warp yarn, geometric relation from the beam to the back rest to the warp stop motion 5034
warping. drawing-in. techniques at IMB. trend toward pragmatism 6975
water jet and air jet looms by Nissan. studied for weft insertion performance 5018
water jet. Model H 175 M series looms from Strojimport 8262
weak places in yarn. effect on weavability 1721
weave tightness. coefficient of weaving 227
weft accumulator units Nova and Laser from IRO. automatic speed control 5020
weft accumulators for high speed looms. function, advantages 5896
weft insertion. methods available for production of various fabrics 7423
winding. differences between various bobbins 3411
Woody Logsdon, fiber artist, specializes in photoweaving 1405
wool fabric, one and a half layered. parameters on the STB 4-220 loom 228
wool fabrics with background weave and foreground design, new weft insertion system 5035
wool warp yarns, fatigue tests, effects of weaving. sizing, linear air density 4148
woolen fabric on projectile loom. weaving analysis 229
yarn joints in all-wool yarns. effect on tension of running yarn 207
yarn stress in selvage and temple areas. influence on machine performance and cloth quality 4213
yarns, fancy. from reusable textile materials 1725

WEAVING INDUSTRY (SEE ALSO OTHER HEADINGS, SUCH AS CARPET INDUSTRY, LOOMS, TEXTILE MILLS, TEXTILE TRADE)
air jet looms at Thomaston Mills' Peerless Division for sheet

production 2239
air jet. Toyoda JA loom. accommodation in spinning operations 7416
Artificial Intelligence. systems from Picanol for weaving operations 4725
ATME-I [1988]. equipment to be shown 5536
British weaving companies, recent machinery purchases and future plans for computerization 2587
CAD/CAM. woven fabric planning. new economics of design 3428
CINTT. future. developments 5867
computer control of production lines, data control 728
cotton. international statistics. spinning, weaving, and raw material consumption data [1985] from textile producing countries 2417
current technology, trends in weaving automation. weaving in the year [2000]. future trends 5893
developments in weaving machinery technology, present and future 6672
efficiency. measurements of for evaluation of economy 6366
India [1987]. current state of powerloom, handloom, and composite mill sectors. performance 4155
India's economy influenced by powerloom weaving 6664
India. comparison with United States and Europe 5036
India. history and current state of mill, power loom, and hand loom sectors 6405
Indian handloom sector. employment potential and future prospects 8960
innovations in the Soviet weaving industry. new looms, parameters, products 4214
investment in weaving mills. questions to guide in calculating 3406
Ireland. optimistic outlook. future prospects for various industry sectors 7858
ITMA [1987]. weaving technology refinements, microelectronics and computers 2574
Japanese. air jet looms. increased popularity due to versatility. various air jet 2582
materials. importance of spinning to industry 2585
Mikawa. Japanese cotton fabric producer. marketing efforts. cotton fabric production 4990
mills. future evolution. new systems and improvement in yield 2585
Pakistan. mills and small powerlooms industries compared 6399
predictions for the future 3452
production management, computer aided, in weaving. developments 5866
production planning, machine control, and progress control 732
robot system by Sulzer. applications in automated weaving 5037
sheds. ambient ionization and effect on sanitation 5553
Soviet. automation and computer use 5025
studies of time yield efficiency of old and new machinery 2551
Swift Textiles, Thomaston Mills, Avondale Mills, and the Bibb Company, recent loom purchases 2591
woven fabrics, developments. popularity rising. Spain 3453

WEAVING MACHINERY, SEE CARPET LOOMS, LOOMS, LOOMS--SHUTTLELESS, NARROW FABRIC LOOMS, PILE FABRIC LOOMS.

WEB FORMATION, SEE KNITTING, NONWOVEN FABRIC MANUFACTURE, WEAVING.

WEFT MECHANISMS (SEE ALSO OTHER HEADINGS, SUCH AS PICKING AND PICKER STICKS--WEAVING, SHUTTLES, WINDING MACHINERY)
accumulators for high speed looms. function, advantages 5896
air jet loom. differential equation model to study weft flying movement 8266
air jet looms. developments for insertion of four wefts 5888
air jet looms. jet characteristics. special reed system 2581
air jet. air flow control in looms 2594
air jet. air flow velocity in closed constrictors reduce energy consumption, increase weft insertion rate 5873
air jet. automated weft break repair on looms. [1987] ITMA 6671
air jet. Lindauer Dornier Model DLW loom 8261
air jet. looms. weft and warp yarn loads 5891
air jet. Picanol's PAT-A loom and Pick Repaid Automation 3442
air jet. yarn tension fluctuations during weft insertion on looms 1007
automatic weft repair system PSO by Picanol for their GTM machines 7422
dobbies, programmable computer controlled 4176
dual insertion weft mechanism for STB looms, operation, design, analysis 4215
flax rotor spun weft yarn breakage on the STB loom due to weft mechanism 215
gripper. Sulzer Ruti P 7100 series of looms, improved gripper weft insertion 3430
heddle geometry. droppers. influence on warp tension 4216
history of looms, shuttleless loom design, introduction 4194
improved weft device for STB loom 5038
insertion rate 1761
insertion. computer aided. warp and raschel machines by Karl Mayer 6648
ITMA [1987] exhibit profile of featured machinery 4788
ITMA [1987]. auxiliary weaving equipment 1757
jacquard machines, CF 420 and CR 520. from Staeubli 4217
NEM-1 weft mechanism, tension control, application on STB2-250Shl loom 230
NEM-1 weft mechanism, tests on STB-1-180-T loom, improvement 231
Oy Tech Center. yarn tension monitored electronically on weft knitting machines 6713
preparation, weaving. Fischer-Poege 6632
problems in development of fully electronic jacquard mechanism 7177
projectile. increased speeds with P 7100 from Sulzer Rueti 4218
projectile. Sulzer P7100 loom. uses in carrying weft thread through shed 5016
rapier displacement, early release of weft yarn, formulaic method 5017
rapier Lindauer Dornier model H loom 3440
rapier looms. ITMA [1987]. dominance in field of broad weaving 5010
rapier. double. Dornier loom with unique insertion system 6673
rapier. flexible loom model G 6100 from Sulzer Rueti 5875
rapier. G6100 weaving machines from Sulzer Rueti 1754
rapier. Picanol manufactures Pre-winder Switch Off for automated weft repair on GTM looms (Trade Lit.) 8248
rapier. technical textile production with Dornier weaving machine 4181
rapiers, air and water jets. most suitable method for a particular fabric 7423
rollers and roller coatings for the textile industry 4752
shedding technology, development. dobbies 4220
shuttleless developments in loom engineering, weft insertion. future of increased automation 8277
shuttleless draw looms. differential, functional, and structural analysis. color control system examined 233
shuttleless looms. design problems for faster machines 7406
shuttleless. USK-1 device for electronic control on STB draw looms 232
shuttleless. weft mechanisms on looms. control of two weft yarns 4221
STB draw looms, productivity, influence of weft mechanism, lay, picker 5015
water jet. converting the KF shuttle silk loom, potential problems 4186
water jet. sensor, optical, and control system for looms, design, abilities 4219
weft thread movement of Czech looms. measurement methods 7414
wool fabrics with background weave and foreground design, new weft insertion system 5035

WEFT STRAIGHTENERS, SEE FABRIC HANDLING EQUIPMENT.

WEIGHING, SEE MATERIALS HANDLING AND UNDER SUBJECT HEADINGS OF SPECIFIC PROCESSES.

WELDING SEAMS, SEE SEAMING.

WHITENESS, SEE BLEACHING, COLOR MEASUREMENT, OPTICAL BRIGHTENING.

WIGS

WINDING (SEE ALSO OTHER HEADINGS, SUCH AS COMPOSITES, KNOTS AND KNOTTING, MONITORING SYSTEMS, REELING, WARP PREPARATION, YARN PACKAGES)
accessories for looms. yarn tension and warp guiding systems at [1987] ITMA 3432
autoconer. Schlafhorst's 238. automatic cone winder 5859
automatic end transfer apparatus attached to dual chuck continuous yarn windup 4951
bobbin radial compactness distribution. calculation 6576
density determination calculation method for cops and bobbins found inaccurate. new method explained 190
developments at ITMA [1987]. computer control systems and robotics 6627
Digicone system offers uniformity in winding 8478
Digicone. dyeing, yarn package. Schweiter 6126
Digicone. produced on AR 2000 Winding Systems 4132
Digicone. Schweiter MDF 4130
Digicone. Schweiter VTA Stretching-Stabilizing Winder 4134
epoxy-amine-glass composite part. filament winding simulation 4346
factors affecting process and yield in winding operation. modernization 8249
filament. wound-filament reinforcement members. numerical control of mechanism 8232
filaments, composite manufacture. kinetic and heat transfer models 8353
flange bobbin deformation during winding. computer program for bobbin strength and rigidity 191
hard twist yarns. forces in heat setting and winding 7381
Jasper material transport for yarn winding and dyeing without personnel 3578
mathematical model of tension state on beams 4172
modern processes. importance to subsequent steps in textile production 3411
PB-114Sh balloonless ring for wool. defects, increased slubbing during winding 4115
precision. anti-ribboning analysis and design 192
quasi-closed, changes in machinery design, calculation 4173
splices, factors influencing yarn strength 6584
Team-tex uses residual yarn automatic cone winder from Karl Mayer to rewind waste thread 8195
tension washer inertia. effect on uneven yarns 6622
Texkimp. creels, unwinding. Graflok carbon fiber 5834
textured yarn pirn winding tension. affect on fabric properties 3417
textured yarns, unwinding behavior 5809
Thermo Splicer from Schlafhorst 5857
thermoplastic impregnated tows of carbon, Kevlar, and fiberglass. economics and properties 4174
unwinding textured polyester filament yarns, false twist. behavior and process optimization 4966
woolen yarns. description of processes available. parameters used 8142
yarn package structure for dyeing uniformity, precision winding 5004
yarn packages for dyeing. straight faces with side correction on Digicone packages 8480
yarn winding angle in package of biconical form 8218
Zollern-Vertrieb ten color, auto-doff thread winding machines 3422

WINDING MACHINERY (SEE ALSO OTHER HEADINGS, SUCH AS BALLOONS, BOBBINS, COMPOSITES, FABRIC HANDLING EQUIPMENT, MONITORING SYSTEMS, REELING, SPINDLES, SPINNING MACHINERY, TWISTING MACHINERY, WARP PREPARATION, YARN PACKAGES)
air entanglement winder, automatic, from Belmont Textile Machinery, for multifilament yarn. carpet industry 3425
Autoconer 238 from W. Schlafhorst and Company. key-button winding parameters 3423
Autoconer features splicing mechanism and splice tester 3376
autoconer. Schlafhorst's 238. automatic cone winder 5859
automated. shown at ITMA [1987] exhibition. linkage between winders and twisters 6579
automatic doubling and winding machine. automatic winder from Heinrich Schnell 194
automatic end transfer apparatus attached to dual chuck continuous yarn windup 4951
automatic winders, yarn guide pipes. flow resistance effects of suction nozzle and guide pipe 2570
balling and banding machine, PEL automatic. Superba 5006
Barmag's EKS6D for industrial yarns 5839
Barmag. spin-drawing, texturing, and winding machinery 5666
Campen's Type IT-800 batch winding and unwinding system for nonwovens and synthetic leather operations 3489
coners from Mayer 4110
Digicone winding combines merits of precision and random crosswinding 8250
Digicone. produced on AR 2000 Winding System 4132
Digicone. Schweiter MDF 4130
Digicone. Schweiter Mettler's system. yarn packages for dyeing 4131
Digicone. Schweiter VTA Stretching-Stabilizing Winder 4134
draw-winding machine for medium-heavy deniers. Riecord J3/10 from Rieter 8162
drums. importance of material and design to yarn quality and costs 5861
Espero winding system from Savio 2497
fabric rolls, batch-steamer for bleaching from Menzel 747
Gebrueder Loepfe FR-600 data processing for winding operations 3424
Gilbos. ITMA exhibition catalog 5858
Hacoba-HB-2000. shrinking and winding yarns 3377
ITMA [1987] highlights of yarn manufacturing equipment. spinning, winding, twisting 148
ITMA [1987]. developments in spinning technology 8179
ITMA [1987]. manmade fiber production and processing 887
ITMA [1987]. manmade fiber production equipment highlights 802
ITMA [1987]. product descriptions 5838
ITMA [1987]. short staple yarn manufacture 4924
ITMA [1987]. technical advances 6637
ITMA [1987]. texturing machinery, false twist and air 4960
ITMA [1987]. winding trends 993
Mayer Coner RC 10 NG automatic cone winder installed at Danspin. woolen yarns 5005
Mayer Coner RC 10 NG. automatic coarse yarn winder 3378
Mayer Coner waste yarn cheese winder 3421
monofilament winder from James Mackie and Sons 3426
multi-application winding machinery from Gilbos 6625
Murata. profile of machinery 5783
Plyfil from Spindelfabrik Suessen. spinning/assembly winding machine 3360
Plyfil spin assembly winder system by Spindelfabrik Suessen, specifications 994
Plyfil spin assembly winder system from Spindelfabrik Suessen 2569
Plyfil spin assembly winders from Suessen 5798
polyester yarn manufacture, industrial, Rieter J 3/10 draw-winder for optimizing 8141
precision. Schaerer's cross winder, advantages for weaving 193
quasi-closed, changes in machinery design, calculation 4173
Schweiter GZF take-up unit for smooth or textured continuous filament and staple fiber yarns 4133
Sonoco's Positrol plastic yarn tubes for yarn take-up, features and availability 5860

Spindelfabrik Suessen's Plyfil spin-assembly-winder machines. system features, operation 130
spindles and rotors decreasing in Japan, winding and combing machinery gets attention 6595
Superba manufactures PEL 20 automatic ball winder and packaging 3379
Superba PEL automatic ball winder with bander. features and auxiliary equipment 8829
take-up unit, GZF from Schweiter. draw-winding 4952
Team-tex uses residual yarn automatic cone winder from Karl Mayer to rewind waste thread 8195
tension washer inertia. effect on uneven yarns 6622
yarn clearers, clearing efficiency compared 6638
yarn feeding system. Ultra Positive slim line from IRO 995
yarn guide pipes of automatic winders 996
Zinser draw twisting and draw winding machinery. high production speeds 6578
Zollern-Vertrieb ten color, auto-doff thread winding machines 3422

WINDING OF FABRIC, SEE FABRIC HANDLING EQUIPMENT.

WOLPRYLA IS AN ACRYLIC FIBER.

WOOL (SEE ALSO OTHER HEADINGS, SUCH AS BALING, CHEMICAL MODIFICATION, DETERIORATION OF MATERIALS, DISCOLORATION, FURS, HAIR FIBERS, KERATIN, MOHAIR, SAMPLING, WORSTED FABRICS, WORSTED YARN, AND UNDER SUBJECT HEADINGS OF SPECIFIC PROCESSES)
analysis of regain distribution in high density bales 7292
apparel drycleaning, common problems 2860
art. Maria Multhauf's landscapes. dyed silk fibers on wool 4628
bales. handling system at woolbroker 2425
Biology of Wool and Hair conference. genetic engineering 6478
bleaching of wool. technological developments 2723
bleaching with thiourea dioxide 8451
carbonizing damage determined based on ninhydrin reaction 397
carbonizing lambswool for woolen system processing 7364
carbonizing. effects on woolen system processing 7284
carbonizing. new Sperotto Rimar solvent/water carbonizing range 7569
cashmere production in China 7287
Central Research Institute for Wool's ART-120-Sh picker, UO-Sh waste cleaner 4915
centrifuge feed rate in wool scouring. automatic control 8465
Cerifil. long staple spinning system for fine wools at high speeds 5780
clip length and strength measurements. advantages of staple measurements 3235
cochineal-dyed wool. effects of traces of calcium and magnesium ions in water 7626
color. importance. WRONZ method for measuring New Zealand wool 6934
colored wool and its sales growth. Black Sheep Gathering 7285
contaminants extracted from merino raw wool. contents of inorganic and organic components 833
continuous chlorination by Kroy process 6827
continuous finishing lines from Fleissner 1898
Cool Wools are very lightweight 4382
copper(II)-wool keratin complexes. formation 3146
cost estimates for Australian wool [1987]. harvesting, marketing, distribution 3236
crimping process. extra loft for bedding applications 8004
dark fiber concentration in mill batches of top. uniform procedures proposed 28
drycleaning. discussion of basic fibers 2434
drying dyed loose stock with Andar Unidryer 8565
dye reactivity and affinity versus natural variations in dyeing properties 8497
effluent from scouring. dynamic membrane treatment 4768
European and South American wools. amino acid content and variations in dyeing worsted yarns 6479
evaluation of Bayer and Ciba-Geigy insectproof finishes 4488
evolution of wool morphology in Merino sheep 834
Fastran Cool Dry. drying cones of wool dyed in grease with accurate moisture regain, at low temperatures 2302
finer weights in wool and wool blends. trends. strong wool market areas 4013
finishing agents, optical. determination of effectiveness by means of ultraviolet sensitivity 4649
finishing treatments. preprint, shrinkproofing, dyeing 2708
flammability testing standards. need to upgrade to make test results more relevant 8719
global supply and demand 2406
greasy Merino wool compressed to very high densities 3237
greasy wool. biaxial compression to high densities and subsequent storage 2435
greasy wool. compression of preheated wool using less pressure than at ambient temperatures 835
humidity and pilling of wool knitwear 8744
image analysis wool properties 3041
insects, wool digesting. insect resistant agents and methods of application 3662
IWS predicts five percent increase in world wool consumption by [1992] 5620
knitwear market, position in current and future 1389
Laroche. opening, cleaning, blending, and recycling machines 1694
lipid composition, internal. glycolipids 4824
machine-washable wool. selecting dyes 7598
micellar solutions to apply Hercosett resin and hydrogen peroxide 8547
modified suint scouring with nonionic surfactant and alkaline builders 8462
mothproofing. active ingredients. environmental concerns 5303
New Zealand slipe wool industry 2432
New Zealand Wool Spinners mill. semi-worsted and woolen spun yarns 2431
New Zealand wool. applications in bedding products 2433
New Zealand. industry statistics for [1987-1988] season 8936
pressing in instrumented minimum volume presses 2436
prickle. allergic response versus mechanical irritation with wool clothing 6740
processing steps. shearing to finishing 7402
processing technologies. current status and future directions 2437
pyrolysis-capillary column gas chromatography. detection and quantitation of insect-resist Mitin FF and acid dye 29
reaction with sulfamic acid 1547
research and development. role of IWS. significant technological developments in wool processing 4014
research summary. thirty-five years of research 3238
scouring developments over last forty years. opening and wastewater treatment 4010
scouring industry in New Zealand 2703
scouring system developed by CSIRO for Australian wools. Siroscour 1914
scouring technology. areas of improvement 4022
scouring with Freon TF solvent 8463
scouring wool. FLOCOM process developed by Wool Research Organization of New Zealand 6840
Scouring, Waikato Wool Scour. benefits of incorporating extra feedhopper and roller prior to dryer. compared to cost 3576
scouring. improved technology 1913
scouring. new pilot facility at WRONZ. optimization of scouring 7574
sheep breeds. crossbreeding, breed descriptions 7286
sheep production in arid Rajasthan, India. breeding, nutrition, health, and migration of sheep 1624
skin, hair, silk discoveries lead to data on animal breed types used for manufacture of parchment and textiles 7956
snippets obtained with minicorer or guillotine. problems with non-uniform length 5622
sorption of carboxylic acids 3233
Soxhlet extraction for scoured wools. comparison of different

solvents 8448
succinic acid-bis-n-vinylsulfide-anilide. improves various properties of wool 3658
testing initial shear modulus 7291
Texcellana. Texas cotton and short-shorn wool blend for denim and sweater production 928
Textile Institute's [1988] Annual World Conference. review of some papers presented 7964
thermophysiological characteristics of wool compared to other apparel fibers 2438
top making. technical and commercial considerations 3342
total fiber consumption and domestic mill demand. influencing factors 6456
Ultrafresh antimicrobial treatment for wool bedding material 5187
vigoreux printing process for wool sliver 4472
vigoreux printing system for wool developed by CSIRO. Siroprint-Sirosteam System 1956
whitening agents, reactive fluorescent. results of application 2720
wool cores. bulk test precision. inter-laboratory trials 836
wool growers. advice to adopt "fine line" strategy. increase or decrease in value of clip 3239
woolen and worsted processing. wool properties. crimp characteristics 3240
WW mark by Ratti. washable in temperatures to 40 Centigrade with dimensional stability 8428

WOOL BALING, SEE BALING.

WOOL FABRICS (SEE ALSO OTHER HEADINGS, SUCH AS FELT, WORSTED FABRICS)
anti-felt finishing of wool and wool synthetic blends 1902
apparel, women's. pilling tests 4359
automotive fabrics. blue wool sample for testing of polymeric materials. relative humidity problems 7095
background weave and foreground design, new weft insertion system 5035
carbonizing at increased temperatures, effects 396
care and storage of wool garments. tips from Wyoming Extension specialist 2992
cashmere apparel sales [fall 1988] at retail. concerns over price jumps and plans from major department stores 2993
cashmere. soaring prices, popularity in apparel manufacture 2938
Chargeurs' accepted bid for controlling interest in the Roudiere Group 1481
Ciba-Geigy's Braxan WF polyurethane finish for non-felting and washability in wool fabrics 2786
Cool Wools are very lightweight 4382
crepeline, production and qualities 1733
damage to wool fabrics for insects 3751
drycleaning. effects of fabric properties 2859
drying performance test with slightly alkaline water and thymolphthalein indicator 8712
dyeing with active-chromatic dyes 1230
dyeing, woven. KTs-2 optical color measurement tester 1218
fading and degradation of dyed wool fabrics caused by ultraviolet light 7549
fashion fabrics for men's wear [fall 1987]. wool plaids with decorative color accents and cotton fabrics 590
karakul wool in manufacture of tweed fabrics 4991
lighter weight woolens, mills adjust to fashion trend 3115
Limelight collection from International Wool Secretariat, interior textiles 3014
machine washable multicolor wool prints from Ratti 1250
machine washable 6807
medical application suitability of wool and polyester knit fabrics 3537
melange or Vigoureux printing of slubbing 2774
men's wear fabrics [spring, summer 1989]. new wool cloth types 4384
mens' suits [fall 1988], preview of designer styles 1330
mohair and wool worsted suiting fabrics. performance during making-up 7678
mohair. fabric quality relationship to mechanical properties 7540
natural yellowing of white wool garments 3771
New Zealand wool classification 5621
oil and water repellent treatments in organic solvents 1979
photoyellowing caused by retention of chlorinated solvents used in drycleaning 3752
pilling of wool fabrics. CSIRO study and results 4378
pneumatic device for combining combed wool without knots. advantages for knit fabrics 3343
polyester and wool. aging and annealing behavior described with stress relaxation curves 8717
polyester/wool blended to form nonwoven melded fabric 1816
polymer fittings on napping machines. guidelines for use on wool fabrics 5331
Premiere Vision fabric show, wool exhibits from British companies 372
pressed felt. wool. uses 1886
prickle and itch caused by wool fabrics reduced by flat setting 4383
prickle resulting from skin contact with fabric 7483
quality. system to describe and evaluate 1093
scarves, challis. tremendous increase in popularity 2123
seam slippage 3711
shrinkproofing during felting. nucleophilic reagent/cationic surfactant/cationic resin mixture 2795
silk and wool, color changes from alkalies 7636
Soviet woven apparel fabrics [1988]. designs, fashions 4385
Soviet [1987], wool woven fabric assortment 375
stains, oily, removed by several different methods 585
stretch fabrics laminated with polyurethane 1817
Superwash certification mark from Wool Bureau indicating washability 3750
surface whitened shrink resistant cloth of improved lightfastness 2730
tapestries, Anneke Hoeppener's wool gobelin 4634
thermal-wet conductivity of wool fabric 1635
treatments to improve setting 6936
wear. fabric ageing in actual garment wear 673
weaving one and a half layered fabric on STB 4-220 loom, parameters 228
weaving. Bolivian folk. Aymara and Quechua motifs on wool. patterning in warp rather than weft 4638
wool and flax woven apparel fabrics, deformation during steaming, effects, tests 4358
worsted and woven fabrics [1988] from Soviet mills. designs, uses 373
woven fabric deformation during production, effect of stretching 374
woven fabrics measurement. comparison of .2 meters and one meter cutting intervals 5374
yarn and fabric structural variables. impact on handle 7550

WOOL FIBERS
bending resistance. chemical treatments. fiber fracture studied by scanning electron microscopy 837
canary colored Indian wool. scanning electron microscopy reveals morphological damage to epicuticular cells 1625
cashmere, raw, skyrocketing price. contributing factors, potential solutions 2439
chemical compatibility for printing 385
consumption worldwide of cotton, wool, manmade, cellulose fibers since [1960] 4001
cortex and cuticle separated in wool fibers. studied with transmission electron microscopy and x-rays 8689
cystein oxidation at surface of wool fibers. removal of cleaved proteins needed for shrink resistance 4771
diameter testing methods, lanametry and air flow. airflow preferred 4015
drainage geotextiles. comparison of needle punched or spunbonded synthetics, virgin synthetics or recycled fibers 6774
dynamic modulus of Indian and exotic wools. effect of chemical treatment 4016

electrophoresis in the presence of sodium dodecyl sulfate 659
flameproofing with chemical treatments 1963
high-tech wools, special processing techniques from Kanebo, Unitika, and Shihiko 1626
medullated fibers found weaker at all strain levels than non-medullated 32
metal cation sorption rate by wool fiber 6480
microfibrils, reconstitution of wool and epidermis protein 33
nonionic surfactants in wool. method for estimating concentration and distribution on wool 6481
nonkeratinous proteins. role in crimp formation 838
Perrustol Ave. nonionic antistat from Rudolf for wool and manmade fibers 5175
pile carpet fibers. structure and properties. developments 1627
pneumatic device for combining combed wool without knots. advantages for knit fabrics 3343
processed on the cotton processing system 3320
protein composition. German Wool Research Institute projects 7269
Raman spectroscopy. potential in wool textile research 3042
relative wool fiber strength, Polish method compared to Australian 4017
scouring. energy costs. solutions in natural gas 5619
snippets obtained with minicorer or guillotine. problems with non-uniform length 5622
speed of carding process and relation to fiber breakage. results for wool, viscose fibers 6561
spinnability of sixteen wool fiber blends determined 4953
structure and mechanical properties of wool fibers and assemblies 3208
sulfide sliping process. effect of fiber diameter and wet processing 8005
washing and carding. papers presented at [1986] CSIRO symposium 7367
WRONZ card-gill-Almeter technique for measuring fiber length of scoured wool 8006

WOOL GRADING
New Zealand wool classification 5621
raw wool characteristics to be tested before sale. CSIRO objective measurement 4018
standard and traditional systems. fine wool outperforming coarse wool in market 1628
top batches, uniform procedures to determine dark fiber concentrations for white and pastel trade 28

WOOL GREASE
CSIRO Lo-Flo scouring process and modified liquor flow pattern 4094
effluent from scouring. dynamic membrane treatment 4768
Near Infrared Analysis for estimating extracts from wool treated with dichloromethane 8447
Near Infrared Analysis measures residual grease and regain. replacement for Soxhlet extraction 8745
Soxhlet extraction for scoured wools. comparison of different solvents 8448

WOOL INDUSTRY (SEE ALSO OTHER HEADINGS, SUCH AS TEXTILE TRADE)
auctions [August 1988], prices expected to ease off. world stockpiles, production, prices 4825
Australia. objective measurement, overview tests, clip preparation, and impact on market 856
Australian wool broking industry. economic efficiency study 3241
Australian wool research needs revamping, more emphasis on market priorities 8482
Australian wool. cost of harvesting, marketing, and distribution 6485
Australian. changing role of exporter, methods of trading and financing 7290
buyers' guide, Wool Record, to suppliers and manufacturers 2440
cashmere production in Australia, New Zealand 7288
cashmere, raw, skyrocketing price. contributing factors, potential solutions 2439
Census Bureau's Current Industrial Reports. increased domestic consumption of fine wool, cotton yarns and fabrics 3242
Chargeurs' accepted bid for controlling interest in the Roudiere Group 1481
China, wool and silk cocoon shortages. threaten garment, fabric output, government controls panic buying 7233
China. cashmere production 7287
color. importance. WRONZ method for measuring New Zealand wool 6934
cotton and wool market prices. federal deregulation, international demand 2402
CSIRO objective measurement of raw wool characteristics and adoption of raw wool by description 4018
engineer programs for wool processing mills 5500
fiber consumption up in United States, per capita [1987] figures 5601
finer weights in wool and wool blends. trends. strong wool market areas 4013
future outlook [1990's] at Financial Times International Conference 699
heat recovery systems. performance review and assessment. reducing energy costs 7895
Hungarian, economic analysis, production and export levels 1
Hungary, conservation, effects, changes 4019
India's handknotted carpet industry, decline of domestic raw wool production. New Zealand imports, need for import policy 34
India, economic profile, textile industry review 8949
India, study of wool production on tribal farms 6483
international market outlook. WRONZ system of wool measurement, scouring and chemical twist setting machine 6484
international markets grow due to consumer demand, adaptability to new technologies, versatility, and performance 2441
Ireland. future prospects. optimistic outlook. potential problems 7858
IWS director discusses international wool market, wool programs in Soviet Union, China, Western Europe 4826
IWS predicts five percent increase in world wool consumption by [1992] 5620
IWS. promotional strategies 1632
labor conditions in Rajasthan's wool industry. measures to improve workers' lot 7122
Leventhal of Burlington Menswear discusses wool market and prices at IACD Convention. increased prices and demand 4827
lighter weight woolens, mills adjust to fashion trend 3115
market position history and expectations. effect of synthetic fibers and changing consumer attitudes 2442
market prospects for Australian wool, analysis, opportunities, ways to create demand, future challenges 1631
mills. recycling heat energy from drying processes reduces costs 4734
New Zealand Wool Board's Statistical Handbook [1986-1987]. profile of New Zealand wool industry 1629
New Zealand wool classification 5621
New Zealand wool, applications 35
New Zealand. industry statistics for [1987-1988] season 8936
Pakistan. current status and future prospects 3179
paper-wrapped nylon packs for wool by CSIRO 4089
Prato, Italy, carded wool sector meets challenges of decreased demand for woolen goods 1630
processing technologies. current status and future directions 2437
production costs for woolen garment manufacture by rural Indians in Bharmaur 5496
research and development. role of IWS. significant technological developments in wool processing 4014
Slumberwool U.S.A., profiled 839
tailored sportswear, fashion shift from woolens to worsteds. effect on domestic mills and international outlook 1311
total fiber consumption and domestic mill demand. influencing factors 6456
United Kingdom. history of wool industry and current status of

exports 3178
United States wool consumption and processing mills 5623
United States wool market, international wool prices, demand 36
United States [1987] textile and apparel trade deficit 2367
worsted fabric production, [September 1986] increase. wool production figures 840

WOOL MARKETING (SEE ALSO OTHER HEADINGS, SUCH AS INTERFIBER COMPETITION)
Additional Measurements stabilize market and make wool more competitive 7804
apparel, men's wool suits. retailer reaction to higher wool prices 1388
auctions [August 1988], prices expected to ease off. world stockpiles, production, prices 4825
Australia. measurements and standardization 841
Australia. Objective Clip Preparation. implementation 846
Australian Objective Measurement Project. impact on clip preparation, testing, handling, and marketing 844
Australian Objective Measurement Project. presale core sampling and sale-by-sample 843
Australian wool research needs revamping, more emphasis on market priorities 6482
Australian wool. cost of harvesting, marketing, and distribution 6485
capacity and operation of wool dumping facilities in Sydney 7289
classing and preparation. Australian standards 850
classing fleeces for fineness 852
classing wool clip in Australia 851
classing wool clip to stabilize the relationship between quality and value 849
classing wool clip. core testing and clip preparation 848
Cool Wool Program from Australian Wool Corporation and IWS. fabrics and marketing campaign 842
costs, wool apparel. worries over rise in prices generating business activity in West Coast 1274
fine wool priced higher than coarse wool due to consumer demand for worsted fabrics 1628
history and expectation effect of synthetic fibers and changing consumer attitudes 2442
international markets grow due to consumer demand, adaptability to new technologies, versatility, and performance 2441
International Wool Secretariat. promotion of wool jersey 1494
IWS director discusses international wool market, wool programs in Soviet Union, China, Western Europe 4826
IWS predicts five percent increase in world wool consumption by [1992] 5620
IWS. promotional strategies 1632
IWS. wool marketing programs 1633
New Zealand and Australia. classification of wool for marketing 6486
New Zealand wool classification 5621
noils. United Kingdom 2385
Objective Clip Preparation compared with traditional methods 847
reclaimed wool industry in England hurt by dollar and consumer demand for lightweight wool 1623
sale by description and sample. [1973] status Australia 857
sale by description in Australia. raw wool properties 859
sale by description. Australian Wool Corporation plan 858 860 861
Scouring, Waikato Wool Scour. benefits of incorporating extra feedhopper and roller prior to dryer. compared to cost 3576
wool buyers and exporters in Australia 7290
yellowness measurement compared with color appraisals made by Australian Wool Corporation 7808

WOOL SAMPLING, SEE SAMPLING.

WOOL TESTING (SEE ALSO OTHER HEADINGS, SUCH AS SAMPLING, SHRINKAGE, WOOL GRADING)
absorption of surfactants by yarn 8170
Additional Measurements of fibers predicted to stabilize market 7804
Australia. classing wool clip 851
Australia. commercial wool testing laboratories. yield and micron testing 853
Australia. greasy wool. methods, technology, research 855
Australia. Objective Clip Preparation. implementation 846
Australian Objective Measurement Project. impact on clip preparation, testing, handling, and marketing 844
Australian Objective Measurement Project. presale core sampling and sale-by-sample 843
Australian Wool Corporation investigation of fiber diameter discrepancies between Western Australian wool testing laboratories 3234
Australian wool 841
Australian. classing and preparation 850
carpet pile layer related to fiber fineness and wear properties. wool and polyamide fiber constructions 5442
classing fleeces for fineness 852
classing wool clip to stabilize the relationship between quality and value 849
classing wool clip. core testing and clip preparation 848
color. importance. WRONZ method for measuring New Zealand wool 8934
colorfastness. lightfastness, wet fastness, rubbing fastness 4020
cortex and cuticle separated in wool fibers. studied with transmission electron microscopy and x-rays 8689
CSIRO objective measurement of raw wool characteristics and adoption of raw wool by description 4018
CSIRO research on pilling formation and release, influence of fiber density and structure 4378
DNA identification of animal hair or wool samples 7998
electrophoresis in the presence of sodium dodecyl sulfate 659
fabrics. effects of drycleaning 2859
Fiber Image Display and Measurement. mean fiber diameter 7805
fiber length distributions. rapid estimation with SAWTRI Length/Strength Tester 1450
fiber scale height used for distinguishing mohair and wool 3044
greasy Merino wool compressed to very high densities 3237
greasy wool. large scale testing to compete with synthetics 854
heat and chrome mordanting. nuclear magnetic resonance 7062
image analysis wool properties 3041
initial shear modulus 7291
international market outlook. WRONZ system of wool measurement, scouring and chemical twist setting machine 6484
KES-F technology for measuring fabric handle and WRONZ Automatic Bulkometer 35
lipids studied with thin-layer chromatography and flame ionization detection 8007
Near Infrared Analysis for estimating extracts from wool treated with dichloromethane 8447
New Zealand and Australia. classification of wool for marketing 6486
New Zealand standard test for color measurement of raw wool tentatively adopted by IWTO 845
New Zealand wool classification 5621
Objective Clip Preparation compared with traditional methods 847
objective measurement. overview tests, clip preparation, and impact on market in Australia 856
particle induced x-ray emission analysis of wool and cotton samples prepared as mordant standards 5474
particle size analysis of inorganic dirt 8008
prediction of combing performance of selected wool types and raw wool influence on processing 5458
raw wool. effect of clip preparation procedures on processing 7806
regain distribution in high density bales 7292
regain testing. standard deviation between individual core samples 2209
relative wool fiber strength, Polish method compared to Australian 4017
sale by description and sample. [1973] status Australia 857
sale by description in Australia. raw wool properties 859
sale by description. Australian Wool Corporation plan 858 860 861
snippets obtained with minicorer or guillotine. problems with

non-uniform length 5622
spinnability of sixteen wool fiber blends determined 4953
Streat Moisture Meter measures regain of loose wool emerging from dryer 8461
structure and mechanical properties of wool fibers and assemblies 3208
thermal-wet conductivity of wool fabric 1635
unscoured wool. TEAM computer program, used in Poland 661
urea bisulfide solubility as supplement to alkali solubility for wool damage testing 7063
washability tests from International Wool Secretariat 7086
wool and mohair research laboratory. Texas A&M seeks rapid, objective measurement techniques 7807
wool cores. bulk test precision. inter-laboratory trials 836
wool fiber whiteness formula, ZBD meter 3045
WRONZ card-gill-Almeter technique for measuring fiber length of scoured wool 8008
X-ray analysis of wool after treatment with alkalis, sulfuric and nitric acid and surfactant 1634
yellowness measurement compared with color appraisals made by Australian Wool Corporation 7808

WOOL WAX, SEE WOOL GREASE.

WOOL YARN (SEE ALSO OTHER HEADINGS, SUCH AS WORSTED YARN)
absorption of surfactants 8170
Berlin wool work of the nineteenth century, technique described 2021
contaminants. Siroclear sensing device for detection at winding stage 8238
diameter unevenness. measurement by ITQT Digital Hairiness Meter 3046
double slubbing system produces two-fold woolen yarn at spinning stage 2528
dyestuff and neodymium chloride interaction 5271
fatigue tests on warp yarn. effect of weaving, sizing 4148
friction, effects on areas on wool, cotton, nylon yarns, parameters for speed, tension 4145
Lanaset dyed woolen and worsted yarn. effects on spinning performance 1928
Mayer Coner RC 10 NG cone winder installed at Danspin 5005
Merino, Chokla, Rambouillet crossed with Chokla yarns dyed under different pH conditions. effects on stress-strain properties 975
Model Magnum M3 woolen yarn cards from William Tatham 3330
New Zealand and Indian wools compared for quality. carpet yarns 7986
nongaseous sizing method using powdered polymer 2564
P-75-ShG ring spinner for wool, polyacrylonitrile, wool blends 4936
PB-114Sh balloonless ring for wool. defects, increased slubbing during winding 4115
preparation, spinning and winding. processes used. quality control 8142
semi-worsted processing of wool. computer model 1687
singles and two fold carpet yarns. twist effect on rub felting process 1259
small diameter rotor wool spinner. comparisons with PPM-240-Sh1 rotor spinner 4942
spinnability of sixteen wool fiber blends determined 4953
spinning process for high speed spinning of fine wools, Cerifil 7375
splicing. Thermo Splicer from Schlafhorst 5857
surfactant solution transport 7575
teasel napping, tests on factors affecting yarn hairiness 4964
vigoreux printing by OMP, Biella for high quality worsted yarns 2779
worsted. relation between yarn fault elimination with the QSQ-1 electronic yarn clearer and fabric quality 165
yarn and fabric structural variables. impact on handle 7550

WOOLEN SYSTEM MACHINERY
Central Research Institute for Wool's ART-120-Sh picker, UO-Sh waste cleaner 4915
GC series of drafters, FM-7A rover for wool fiber, performance evaluation, operational recommendations 4086
Haigh-Chadwick Microweigh hopper. automatically weighs fiber prior to carding 5734
ITMA [1987]. computer aided production control 5752
Microweigh automatic hopper for woolen carding 2501
spooling system, high density. Tatham 4908
wool/polyester, viscose/polyester, wool processing machinery, properties 4919
WRONZ Autoclean Opener. opener/duster for greasy wools 1691

WOOLEN SYSTEM PROCESSING
bleaching. removal of discoloration 6835
blending, intimate and/or drawframe for cotton/wool blends. dyehouse problems, apparel manufacturer 4075
carbonizing lambswool 7364
carbonizing raw wool and mohair 7284
CSIRO carding trials. thickness of fiber layer of swift 4077
CSIRO Lo-Flo scouring process and modified liquor flow in effluent treatment system 4094
CSIRO scouring trials and results. symposium of new approaches to wool scouring 4413
decating. Contipress-MR-Process 493
developments in wool dyeing and finishing. use of continuous shrink resist treated wool 6116
double slubbing system produces two-fold woolen yarn at spinning stage 2528
Haigh-Chadwick. Microweigh hopper eliminates slubbing in high production woolen carding 4906
high density compression of wool tops improves productivity 4445
ITMA [1987]. developments shown in all areas and importance of computers 4898
jute. woolenized jute. caddis. property comparison 7544
Kroy, Canadian continuous chlorination process for treating wool tops, effect on dyeing. IWS study 6559
mill consumption of apparel class and carpet class raw wool and manmade fibers surveyed by Census Bureau. [1987] showing increases 4021
New Zealand Wool Spinners mill. semi-worsted and woolen spun yarns 2431
prediction of combing performance of selected wool types and raw wool influence on processing 5458
preparation for small wool lots to achieve uniformity after carding 4828
process to preserve bulk of wool yarns during package dyeing developed at CSIRO 4446
processing technologies. current status and future directions 2437
research and development. role of IWS. significant technological developments in wool processing 4014
review of process. effects of finishing. thermal comfort and other wool properties 3240
scouring developments over last forty years. opening and wastewater treatment 4010
scouring. means for achieving improved 4022
spinnability of sixteen wool fiber blends determined 4953
spooling system, high density. Tatham 4908
Topsoft, polymer treatment to combine with shrink-resist polymers applied during wool processing. procedure details 6560
United States wool consumption and processing mills 5623
vigoreux printing process for wool sliver 4472
wool and wool/nylon yarns, use in tufted carpet due to WRONZ's Chemset process 5812
wool garments, finishing technique 6846
wool/polyester, viscose/polyester, wool processing machinery, properties 4919
yarn evenness. effect of carding 5731

WORK STUDY, SEE TIME STUDY.

WORSTED FABRICS

monofilament yarns by filament separation technique 7358
Premiere Vision fabric show, trends in worsteds and linens from European weavers 2698
production, increase [September 1986]. caused by increase in wool consumption 840
tight warp and weft in polyester and wool blend worsted fabrics. causes 6750
woven wool fabrics [1988] from Soviet mills. designs, uses 373

WORSTED SYSTEM MACHINERY
apron cradles for short bottom aprons, from SKS 4119
early stage. scoured wool to top. processing research examined 4072
fiber loading on the main cylinder, effect of top length and noilage 116
ITMA [1987]. offerings in worsted spinning systems and yarn preparatory machinery 3323
ring spinning machine Model 2122 K from Textima. worsted yarns 3364

WORSTED SYSTEM PROCESSING
Cerifil, long staple spinning concept developed by Cerit, Pordenone. spindle, design, and spinning processes 4112
computer analysis of spinning operations, material flow in mills 8758
early stage. scoured wool to top. processing research examined 4072
greasy wool. effect of staple strength and position of weakness on spinning 159
hairiness, yarn. causes and reduction 6589
ITMA [1987]. developments shown in all areas and importance of computers 4898
New Zealand Wool Spinners mill. semi-worsted and woolen spun yarns 2431
review of process. effects of finishing. thermal comfort and other wool properties 3240
semi-worsted processing of wool. computer model 1687
spinning of flax tow on cotton and worsted system technologies 3337
top making. technical and commercial considerations 3342
worsted cards. increased productivity and quality. fiber density at the swift 115

WORSTED YARN
Cerifil worsted spinning frame 5782
circular Leno fabrics. Leno 2 circular loom from Starlinger and Company 5871
European and South American wools. amino acid content and variations in dyeing worsted yarns 8479
Indian worsted industry examined for quality knitted yarn 8209
Lanaset dyed woolen and worsted yarn. effects on spinning performance 1928
polyester. Teijin's Delite middleweight 4972
processing. early stage, examination of researcher 4072
RSK-Sh worsted system carder, abilities, sliver properties 4080
splicing. Thermo Splicer from Schlafhorst 5857

WOVEN FABRICS
air jet versus ring spun, properties, uses 4143
analytic method to control raw material consumption, parameters 5039
broadwoven gray fabrics, average weight and width [1977-1982] statistics 2700
broadwoven gray fabrics, average weight and width [1982-1987] statistics 2699
carrier, woven fabric, used as leather substrate in footballs 1772
composite materials, reinforced. woven fabrics 7827
core yarn fabrics. influence of repeated laundering on air permeability 1298
core yarn woven fabric for wrapping vee belts 1773
curtains 8663
double warp fusible weft design for men's wear interfacings 5040
dyeing, continuous, measurement of edge/center/edge color differences 407
finishing treatments with ammonia. woven linen and ramie fabrics 399
flax, flax-type. bleaching process using oxygenated water and ultraviolet radiation 3566
formula, structural coefficient, analysis of loom suitability 5157
fraying in woven fabrics. prevented by edge finishing and interlining tape 3522
geotextile mats. reinforcement for floating embankment in Turku, Finland 7794
geotextiles for roadbed reinforcement. influence of fabric type, placement, and anchoring 7782
geotextiles with polypropylene geomembrane coating for rebuilding breached dam 7788
glass filament fabric measured for physical thermal-wet comfort and air permeability 376
industrial textiles. applications. protective clothing. geotextiles 6808
JIS L 1062 yarn distortion test in woven fabrics 2211
karakul wool in manufacture of tweed fabrics 4991
mechanical properties. changes caused by calendering 489
medical, geotextile, agricultural uses of manmade textiles 7532
moisture transfer model for testing comfort 5469
neutral plane at application of pure bending determined 8429
new apparel fabrics [1987/1988], jacquard designs 5011
novelty yarns for home furnishings industry. market trends 977
photometric method, light resistance of nylon, polyester, tests 4678
polyester geotextile mats. chemical and damage resistance, creep. limiting factors for soil stabilization 7528
polyethylene glycol, fabric modification through crosslinking 6062
proper warping, weft preparation, shuttleless weaving for open end yarns, fabric quality standards 4171
quality appraisal. important factors 3063
quality indicator determined for new woven blend fabric 5118
raincoat fabrics, quality requirements, comfort properties 377
reflection coefficient in infrared light for undyed fabrics 5122
sewability, tests 4386
silk and polyester (Lavsan). single bath, single color active dyeing 422
Soviet classification system for woven fabrics, based on nomenclature of indicators 5153
Soviet weaving mill fabrics composed of manmade silk filament yarns 5156
Soviet woven wool, cotton, and manmade apparel fabrics [1988]. designs, fashions 4385
Soviet [1987], wool woven fabric assortment 375
Soviet [1987], woven flax fabrics 323
specialty fabrics from Tuellindustrie 2663
tensile testing of viscose/cotton, cotton/acetate, acetate, cotton woven fabrics 313
tightness factor calculations 8718
Tygatherm, surface heating fabric, flexible. Fothergill 1057
ultra-water repellent ski-wear fabric. Super-Leocks from Asahikasei 8430
used to determine tear load, width, surface density parameters for new woven wool fabrics 4179
Vald. Hendriksen VH-Jet 80 jet dyeing machine. test runs with cotton, manmade, knit and woven fabrics 6889
water penetrability during hydrostatic pressure 378
waterproof, breathable sportswear fabrics of ICI's Tactel 24 Carat polyamide microfiber 1671
weave type determined by digital image processing 2701
wettability and repellency of textiles. contact angles of monofilament nylon and polyester mesh screens to water 671
wool and flax woven apparel fabrics, deformation during steaming, effects, tests 4358
wool fabrics with background weave and foreground design, new weft insertion system 5035
wool, woven fabrics, pore structure determination, formulas 316
wool. dyeing, KTs-2 optical color measurement tester 1218
worsted, wool [1988] from Soviet Mills 373
woven fabrics, developments. popularity rising. Spain 3453

X-RAY (SEE ALSO OTHER HEADINGS, SUCH AS CHROMATOGRAPHIC ANALYSIS, ELECTRON MICROSCOPY, IDENTIFICATION, SPECTRUM ANALYSIS, TEXTILE TESTING)
analysis of Neolan Blue 2G uptake by mohair and kemp 7592
analysis of wool after treatment with alkalis, sulfuric and nitric acid and surfactant 1634
azo pigments from acetoacetanilide. crystal structures 8523
cotton and viscose fibers. X-ray orientation profiles. changes due to swelling and stretching treatments 5604
energy dispersive x-ray spectrometry for observing modern silk treated with weighting agents 4823
liquid-crystalline copolyesters. X-ray diffraction 879
PBT. microfibrillar morphology. SAXS 2483
powder pattern for C. I. Pigment Yellow 60 dye 6905
small angle X-ray scattering intensity in cotton 8685
thermotropic aromatic polyesters examined by x-ray diffraction. structure 7349

YARN CLEARERS (SEE ALSO OTHER HEADINGS OF SPECIFIC MACHINERY)
efficiency, calculations and comparisons 6638
fluff accumulation from cotton, removal with acid 8143
ITMA [1987]. trends 993
wool yarn, worsted. relation between yarn fault elimination with the QSQ-1 electronic yarn clearer and fabric quality 165

YARN GEOMETRY (SEE ALSO OTHER HEADINGS, SUCH AS TWIST)
air jet spun yarn structure related to tensile properties 5771
fiber straightness and alignment in a yarn, sliver, or roving. electrophoretic testing method 4664
loops, plain. shape factor. rotor spun cotton yarns 5460
multifilament polyester yarn. interlink effect. nomenclature and characterization 8212
radial packing density of rotor and ring spun yarns 8703
structure. calculating packing density, pore diameter, compression, other properties 3395

YARN GUIDES (SEE ALSO OTHER HEADINGS OF SPECIFIC MACHINERY)
automatic winders, yarn guide pipes. flow resistance effects of suction nozzle and guide pipe 2570
coefficient of friction between yarns and contact surfaces 4140
curved pipes of automatic winders. dynamic behavior study 996
flat knitting machine, thread positioning device. Universal 6711
IRO, Memminger units for circular knitting machines at ITMA [1987] 7445
ITMA [1987]. looms and accessories 5867
jacquard raschel machine RJSG 4 F-NE from Mayer with electromagnetic yarn control. apparel, underwear applications 1002
positive yarn feeds. underlying principles. lists of manufacturers and products 2596
rotor, balloon shape, tension control, yarn guide displacement 4934
Trip-Lite's new product lines in yarn feeding and stop motion machines 4159

YARN IMPERFECTIONS (SEE ALSO OTHER HEADINGS, SUCH AS NEPS, UNIFORMITY, YARN CLEARERS, YARN QUALITY)
breakage in warps predicted by mathematical modeling 3826
breakage. effects of opening roller on tensile strength of yarn 2526
broken singles, detection. a unit developed by Tashkentskoe Spetsialnoe Konstructorskoe Bjuro Textilnykh Mashin 109
causes of yellowing in yarn packages during RF drying 6952
Classimat faults. effects of faults and sizing on weaving performance 173
contaminants. Siroclear sensing device for detection at winding stage 8238
Corolab. continuous yarn monitoring system for rotor spinning from Schlafhorst 3368
diameter unevenness. measurement by ITQT Digital Hairiness Meter 3046
doubling. guideline's imperfections reduced. ratio between single and double yarn 971
faults in cotton yarn processed on drawing frame type A272F. rotating and fixed pressure bars compared 106
fiber blending irregularities. effects on quality of resulting blended yarns 5729
fiber flies. result of mechanical active impinging on yarn in knitting 5053
filament yarn diameter. Micro Sensors M/8000 online denier tester 8702
filament yarn fabrics. causes 1841
hairiness. causes and reduction 6599
hairiness. Zellweger Uster Tester 3, test method 4665
heat setting. effects of heat transfer on hard-twist yarn 8577
influence on knitting performance and fabric quality 7436
irregularities. hosiery industry focusing more on yarn quality, especially in textured yarns 3390
jute. hairiness 5616
Keisokki Classifault II computer based yarn fault classifying system 3824
Keisokki Classifault II system for classification of yarn faults 972
open end spinning of cotton. dust in the rotor 3373
PB-114Sh balloonless ring for wool. defects, increased slubbing during winding 4115
ply-spun yarn deficiencies 949
polyacrylonitrile self-twist, strength, relation to nip length 7064
polypropylene fibril and non-fibril. shreading during processing. increasing strength with polyethylene 169
ring yarns, carded. drafting systems 6568
rotor cleaning device. effect of air pressure on yarn irregularity 2513
splices. Autoconer 3376
structural organization in viscose, microscopic examination 8225
testing equipment from Rothschild Instruments, Shirley Developments, and Textechno-Herbert Stein 8691
twist, loss in acrylic yarns. relationship to yarn extractive nozzle 2510
unevenness. correlation analysis with photoelectric sensor and Uster Tester GGP 1453
variance length curves used to measure unevenness 2529
warp breakage rate. gray cotton yarn quality. formula for relationship 1014
warp yarn behavior. German research 7401
warp yarn defects, tearing during weaving, causes, prevention 4983
weak places in yarn. effect on weavability 1721
winding uneven yarns. tension washer inertia 6622
winding, yarn clearers compared 6638
Zellweger Uster. devices for random sampling to measure yarn quality 4926

YARN MANUFACTURING--STAPLE YARNS (SEE ALSO OTHER HEADINGS, SUCH AS COTTON SYSTEM PROCESSING, FLAX SYSTEM PROCESSING, WOOLEN SYSTEM PROCESSING, WORSTED SYSTEM PROCESSING, YARN PROCESSING, AND UNDER SUBJECT HEADINGS OF SPECIFIC PROCESSES)
BD-200-Ts rotor spinner with TsYe-1 waste removal system yields less breakage 4941
breakage. rotor spinning. research of causes to discover solution 6583
Cerifil from Cerit. long staple spinning system 5781
Cerifil system. technical solutions and advantages 5761
Cerifil. long staple spinning system for fine wools at high speeds 5780
comparison of yarns and prediction of quality from HVI and Shirley Analyser trash testing 7058
cotton and cotton system wastes. blending, roving, open end spinning, yarn uses 4097
cotton combing waste, processing in preparation for rotor spinning

124
cotton warp, simultaneous sizing and pigment dyeing process, tests 4996
cotton. HVI systems and computers for high quality manufacturing 3319
cotton. Nisshinbo California opened for production. background, facility, equipment 3092
Courtelle Neochrome for spinning colored yarn on rotor spinners 5746
development of yarn processing program 7883
Gemmil & Dunsmore Paraspin fancy yarn wrap spinning machine 3357
hairiness determination in staple yarn, classification of methods used internationally 4146
hairiness. effect of fiber parameters in ring and rotor spinning 6582
improvements in processing. effects on yarn quality and production 1690
ITMA [1987]. electronic technology 4723
ITMA [1987]. manmade fiber and yarn production machinery 900
ITMA [1987]. spinning. new machinery for winding and twisting. automation 6579
ITMA [1987]. winding and twisting short staple yarns 4924
joining. technique developed by Schlafhorst 4967
knitting open end yarns and spring needle wear 5526
Lenzing 1.0-dtex Modal viscose and carding, spinning behavior 3325
low linear density open end knitting yarn, production lines in East Germany, Poland and Czechoslovakia 4098
Meritas Yarns. company development, facility, equipment, products, production levels 1688
multiprocessor control system for fancy yarn twisters, from Saurer-Allma 8194
open end spinning technology. development, principles, and increasing worldwide importance 8182
Orlon acrylic fibers with manmade and natural fibers. Du Pont types of yarns, effects, and knit fashions 2536
patterning technologies for top, yarn spinning systems 8144
Pentwyn 200 splicers from Eadie 3380
polypropylene staple and continuous filament yarns. manufacturing process and machinery 889
polyvinyl chloride/wool staple, knitting, production 4981
processing machinery at ITMA [1987] 4099
ring spinner, CF 43. Schlumberger 8184
ring spinning machine model Filamab 900. for long staple wool, manmades, and blends 3365
ring spinning, future. competition from other methods 3354
ring spinning. new machines on show at ITMA [1987] exhibition 4954
ring, friction, warp, jet, and rotor spinning methods reviewed and compared 3355
Rositta of Holland. modernization of its spinning mills. yarn preparation, rotor spinning 3362
rotor spinning, quality control 1710
rotor spun cotton, cotton/blend yarns. thickness, twist and staple length, relation to breaking load 6588
short staple spinning machinery at [1987] ITMA 5789
short staple spinning. a practical guide to combing and drawing from the Textile Institute 929
SiroSpun system for short staple fibers. Schlafhorst 5792
small diameter rotor wool spinner. comparisons with PPM-240-Sh1 rotor spinner 4942
spinnability of sixteen wool fiber blends determined 4953
spinning machinery. comparative analysis. economic and technical 2512
spinning. open end. effect of opening roller on tensile strength 2526
Suessen parallel yarn spinning system 1701
Superba Yarn Tester. automatic control device 5786
two-ply, short and long. Plyfil Spin Assembly winder from Suessen 3361
ultrafine high performance yarns. carbon fiber. Heitra process 4073
Wiscasset Mills and goals. facility, modernization, products 6558
wool/polyester, viscose/polyester, wool processing machinery, properties 4919
wrap spinner, MG 10. Schlumberger 8186
wrap spinning. concepts, technology, benefits 8185

YARN MONITORING SYSTEMS, SEE MONITORING SYSTEMS.

YARN NUMBERING
measurement. Fast Count System from Zweigle 6267

YARN PACKAGES (SEE ALSO OTHER HEADINGS, SUCH AS BEAMS, BOBBINS, WINDING, AND VARIOUS PROCESSES)
automated inspection and handling 8189
automatic end transfer apparatus attached to dual chuck continuous yarn windup 4951
balling and banding machine, PEL automatic. Superba 5006
cheese mercerization studied 7571
density increased from high pressure squeezing 6640
Digicone dye packages. advantages include levelness, color accuracy, fastness, quality, reproducibility 5007
Digicone yarn package for dyeing from Schweiter Mettler 6639
Digicone. produced on AR 2000 Winding Systems 4132
Digicone. Schweiter VTA Stretching-Stabilizing Winder 4134
dyeing and drying machinery at [1987] ITMA 8501
dyeing problems examined 8514
dyeing with Digicone packages. small number of process stages 8478
dyeing, yarn package. Digicone. Schweiter 8126
dyeing. uniformity achieved with the new Digicone technology 8480
Hamel link transport system for ply yarn packages 8192
handling and transport system, automatic, from Neuenhausener Maschinenbau Havo 132
heat transfer. studied for hard twist yarns 8577
Innovatex transport systems. sliver cans, rovings, and cones 5724
link transport system from Hamel 5748
loading unit PL 40 from Karl Mayer for heavier yarn packages 5823
MasterSpinner from Platt Saco Lowell, no spindle-to-spindle variation in yarn 2524
Mayer Coner RC 10 NG automatic cone winder installed at Danspin. woolen yarns 5005
Mayer Coner RC 10 NG. automatic coarse yarn winder 3378
Minnetti's Apollo robot system. loading and unloading 5543
new cones from Sonoco improves Amital's productivity 8839
package and hanks, yarn. machinery and processes 8539
packages. Digicone from Schweiter Mettler 3592
precision winding for dyeing uniformity 5004
Saccardo product range of yarn carriers 960
Schweiter conveying systems. CON-CO-MAT and RING-CO-MAT 4108
Schweiter MDF Digicone 4130
Schweiter Mettler's Digicone system. yarn packages for dyeing 4131
speed frame doffer, type 660. Zinser 5725
splices. Autoconer 3376
Superba's Type STR 402 yarn ball inspection mechanism and EMB packaging equipment 6367
take-up unit, GZF from Schweiter. draw-winding 4952
Team-tex uses residual yarn automatic cone winder from Karl Mayer to rewind waste thread 8195
two tier carriage creel, GW 2/2, from Mayer. specifications 990
vacuum dyeing of yarn packages, mathematical model 5217
winding angle of biconical form 8218

YARN PREPARATION, SEE SIZING, SLASHING, WARPING, WINDING.

YARN PROCESSING--FILAMENT YARNS (SEE ALSO OTHER HEADINGS, SUCH AS APPLICATORS, CHEMICAL AIDS TO PROCESSING, CRIMPING, CRIMPING MACHINERY, KNOTS AND KNOTTING, MANMADE FIBER EXTRUSION, STOP MOTION DEVICES, TEXTURED YARNS, TOW PROCESSING, ZERO TWIST YARNS, AND UNDER SUBJECT HEADINGS OF

SPECIFIC PROCESSES)
aerodynamics of the quench duct. theory and practice 3919
air entangled process from Texture-Tex 8191
air entanglement machine with computer control from Gilbos N.V. advantages for filament yarns 3371
air jet texturing process reviewed 3385
air textured yarns. expansion of horizons through use of finer filaments 7386
air texturing machine, AM4 from Barmag 4968
air texturing systems from Barmag 8199
assembling installation from Zell 4955
ASTM [1988] specifications and standards listings 8931
continuous, processing of, discussed at [1987] ITMA 887
Dorlastan. formation, advantages and uses 5815
draw texturing machinery from Rieter 5806
dyeing. Superba heat setting apparatus for carpets. uniform dyeing 497
Eltex. tangling machine, TA. BCF carpet yarns 5799
extrusion machine for micro-denier POY polyester filament yarn 8197
Fiber S. new comfort fiber from Snia Fibre. properties 4892 5721
filament yarns used in air jet texturing 8201
finishing processes and materials for chemical fibers in spinning 8136
flat filament yarns. orientation and crystallinity 4026
flow field in yarn path 166
hard twist filament yarn. tension generated by twister with false twist spindle 2527
imitation of spun-yarn properties and wearer comfort 4151
impregnation, ultrasonic. glass and carbon filaments 5810
improvements in processing. effects on yarn quality and production 1690
ITMA [1987]. electronic technology 4723
ITMA [1987]. new techniques for filament yarns. gains in quality 6602
let-off, electronic and mechanical warp. whiproll dynamics. filament yarns 4175
machinery developments exhibited at ITMA Paris reviewed 940
Mayer's ZM(Z)G warping system for high tenacity yarns 989
monofilament winder from James Mackie and Sons 3426
multi. automatic entanglement winder from Belmont Textile Machinery 3425
Neumag processes for spinning polypropylene filament yarns 8175
novelty yarns from filament yarns. methods 5800
partially-oriented yarn extrusion to produce polypropylene filament yarns 8067
Pentwyn 200 splicers from Eadie 3380
polyamide 66 microfiber, Tactel 24 Carat by ICI for woven sportswear fabrics 1671
polyester production. mill restructuring, technology 8749
polyester tire cord. development of HMLS fibril-to-fibril chains by Hoechst Celanese 8211
polyester yarn, future in apparel. fancy, twist, and flame retardant innovations 8217
polyester, thermoanalytical measurement. structural characterization, prediction of dyeing behavior 8704
polyester. Textima's 3010 draw twister 5756
polypropylene filament yarn. high speed spinning 4921
polypropylene filament yarns, preoriented. spinning 6554
polypropylene. modern high speed methods (Conf. Paper) 8174
preoriented polyester yarns, structure and dyeing 4028
production of knitting mills. quality and methods 3396
production technology seen at ITMA [1987] reviewed. filament yarn manufacture 944
Puasson breakage prediction method on BD-200 rotor spinners, filament yarns 4113
Raufil PVC-coated monofilament bundle yarns from Rehau 3660
Rhone-Poulenc's developmental role. new fiber Meryl 7339
Soviet weaving mill fabrics composed of manmade silk filament yarns 5156
spin-draw-texturing, continuous. polypropylene BCF 5807
spinnerets. Groebzig 4029
splice strength and elongation 4948
tennis strings, extruder from Vollmer Tennis Strings 5633
Terital polyester from Montedison. production, silk-like fabric applications 8215
textured combined yarns. preparation parameters and strength 3394
textured yarn. Micro Sensors M/8000 online diameter tester 8702
textured yarns, air jet. influence of process and supply on properties 4961
texturing machine, RMT air jet. Staehle 4969
texturing, air jet. process description 5805
texturing. air and intermingling. developments at ITMA [1987] exhibition 4962
thermofixing of false twist, stretch textured, polyester yarns. crimping properties 4138
twisters, Saurer-Allma's ESP spin twister for novelty yarns. utilizes sliver spun and filament yarns 3363
twisting, texturing, throwing. ITMA [1987], trends 5801
unwinding behavior of textured yarns 5809
VTS-05 spindle from Volkmann for cabling carpet yarns 8196
weaving multifilament problems encountered, solutions. rigid rapier loom from Dornier 6670
weaving on air jet looms. exceeding yarn strength results in breaks and overstretching 3454
weaving, analysis of tension, kinking, friction, fabric motion 4188
winding. thermoplastic impregnated tows of carbon, Kevlar and fiberglass. economics and properties 4174
Wistel polyester from SNIA Fibre. specialty modifications in polymer, spinning, processing stages 8216

YARN PRODUCTS, SEE CORDAGE, ROPE, SEWING THREAD, TIRE CORD.

YARN QUALITY (SEE ALSO OTHER HEADINGS, SUCH AS ABRASION, CONSUMER ATTITUDES, DETERIORATION OF MATERIALS, DISCOLORATION, COLORFASTNESS, YARN IMPERFECTIONS, NEPS, INSPECTION, SHRINKAGE, UNIFORMITY, AND UNDER SUBJECT HEADINGS OF YARNS OF SPECIFIC FIBERS)
acrylic and polypropylene fibers and blends. rotor spinning effects 7377
air jet spinning system, Toray Engineering's AJS-102, retains yarn quality. machine features 3372
air jet spun yarn structure related to tensile properties 5771
air jet textured yarns. testing methods 5816
air jet versus ring spun, properties, uses 4143
alkali cellulose. fractional composition after degradation 37
automatic detection and testing of splices with Textechno devices 4106
carding machinery's feed plate influences carding efficiency 8156
cotton fiber maturity, and yarn quality. thirty-six studied 2410
cotton, polyester and viscose fine-titer yarns. performance in fabric production 3407
cotton. improved evenness. mill in China studied 174
cotton. rotor spinning performance of different United States varieties 2520
developments in synthetic sizes and evaluation with weaving yarn 4163
double yarns. effects of doubling twists on yarn properties 6601
drafting, ringframe. spindle to spindle variables and yarn quality 6569
drafting. top arm wear and yarn quality 6570
draw-sizing compared with warp-drawing. quality and costs 8237
Enka's test system for high speed weaving. Itemat Interlacing Tester 3823
evenness tester. Keisokki Model KET-80B unit 974
evenness tester. Keisokki Model KET-80C unit 973
fabric production. raw material control, supplier certification programs 2266
fine yarns from ring and rotor spinning compared 4928
fineness, strength, and staple length relative to the strength of rotor spun yarn 3049

hairiness formation. role of fiber migration. forces acting on yarn 6614
hairiness, causes of and reduction 4135
hairiness, yarn. sources 6566
hairiness. causes and reduction 6599
high speed weaving. demands on smooth and textured filament yarns and wrapped yarns 5894
hosiery industry. problems and challenges. new technology. textured yarns 3390
humidity. influence during rotor spinning 8181
impact of winding drums 5861
impact on weaving and knitting operations 5602
improvements in processing. effects on yarn quality and production 1690
India. necessity of improvement for survival of mills. prospects 4925
Indian worsted industry examined for quality knitted yarn 8209
influence on knitting performance and fabric quality 7436
Keisokki Classifault II system for classification of yarn faults 972
knitting mills. quality and methods of producing novelty yarns 3396
Lenzing 1.0-dtex Modal viscose and carding, spinning behavior 3325
monitoring system. Corolab for Autocoro rotor spinner 5775
open end Controller M.D.1.4. from Otto Stueber 962
open end spinning in Czechoslovakia. developments 4932
Open End Tester 80 from Otto Stueber. yarn quality control at rotor spinning machine 961
open end yarn quality. effect of number of draw-frame passages 6571
Platt-Saco Lowell Masterspinner yarns compared with open end spun yarns 1705
polyester/cotton yarn evenness improved in Chinese spinning mill 4976
PPM-120-3 air jet spinner, operational parameters for cotton yarn 4122
raw materials, top quality needed to ensure optimum spinning results 4930
rayon yarn cakes. defects, causes, cures. guidelines for production 6551
ring frames and drafting systems studied for yarn quality 142
rotor spinning of cotton and cotton waste yarns 4933
rotor spinning, effect of environment 1710
rotor spun cotton. comparison of processing quality of gin-cleaned cotton versus mill-cleaned 6452
rotor spun doubled yarns 5754
roving feed yarn, double. structural mechanics 6573
Saurer-Allma FM-F. use of computer controlled high dynamic servometers while maintaining twist quality 8193
Saurer-Allma Jantra two-for-one twister. production parameters, yarn quality 155
sizing, high pressure 6640
spun yarns for knit fabrics 5142
strength and integrity. maintenance with high speed carding 4078
Teijin's Delite middleweight polyester worsted type yarn 4972
tenacity of Modal viscose/cotton blend yarns in fine weights in circular knit fabric constructions 3397
testing. filament. Zellweger Uster 3C/Automatic Digital Tester 3819
top arm drafting system 5791
two-for-one twisters at Dundee plant. improved yarn quality and production 156
unevenness in ring spun yarns. Statistical Process Control 2269
variance length curves used to measure unevenness 2529
VEB Textima's improved spinning frame flyer for more constant roving qualities 3340
warp breakage rate. gray cotton yarn quality. formula for relationship 1014
Yarntester off-line system from Superba, handles up to thirty-six yarns 160

YARN TESTING (SEE ALSO OTHER HEADINGS, SUCH AS ABRASION TESTING, CRIMP, FRICTION, NEPS, TWIST, UNIFORMITY, YARN NUMBERING, AND UNDER SUBJECT HEADINGS OF SPECIFIC YARNS)

abrasion resistance. accurate application of friction energy 7811
air jet textured yarns 5816
air jet versus ring spun, properties, uses 4143
angora blended yarn. blend ratio measurement using density gradient tube 663
ASTM [1988] specifications and standards listings 8931
automatic test apparatus based on gravimetric measurements 6268
Betacount Mk2 by James H. Heal and Company. yarn count analysis 3050
bicomponent yarns with different staple length. properties of cotton/polyester yarn during spinning 3821
blends, fiber blending irregularities. effects on quality of resulting blended yarns 5729
breakage in warps predicted by mathematical modeling 3826
breaking behavior of twisted yarn 7396
bulk measurement in Poland, Volumetr IW method 175
comparison of yarns and prediction of quality from HVI and Shirley Analyser trash testing 7058
computer analysis of cotton yarns' strength and elongation, compared to lab tests 4659
core fibers of lesser quality in ring spun staple yarn. calculation of idle zone 4977
cotton warp, simultaneous sizing and pigment dyeing process, tests 4996
cotton weft and warp yarn breakage on shuttleless looms. tension, yarn properties, tests 212
cotton yarns damaged by chemicals during processing. testing and evaluating damage 2210
cotton. data collection system to determine irregularities 176
crimp standards. hot air method and hot water method comparison 4663
deformation equations, solvent changes during extrusion 4844
diameter measurement detector (Trade Lit.) 8183
diameter unevenness. measurement by ITQT Digital Hairiness Meter 3046
diameter. influence on fabric design and properties 177
dielectric perturbation of components in blended yarns 8699
dye affinity. Toray FYL-500 for textured polyester, nylon 8696
dye uptake in textured polyester. Toray FYL-500 continuous affinity tester 8700
Enka's test system for high speed weaving. Itemat Interlacing Tester 3823
evenness tester Keisokki KET80. computer control 8701
fiber straightness and alignment in a yarn, sliver, or roving. electrophoretic testing method 4664
filament yarn diameter. Micro Sensors M/8000 online denier tester 8702
filament yarn testing for high speed weaving, instruments 1452
filament yarns. behavior of on air jet looms. properties and requirements 8223
flat carder, Falubaz CZ-693, produces no-web sliver. evaluation of performance 121
formula to predict amount of a given fiber in a blend, tests on cotton/viscose, cotton/nylon yarns 4076
formulaic calculation flax/polyester staple tear load 5461
formulaic method based on non-linear theory of elasticity, filament 4144
friction, effects on areas on wool, cotton, nylon yarns, parameters for speed, tension 4145
hairiness determination in yarn, classification of methods used internationally 4146
hairiness in cotton yarns tested with Shirley meter 7809
hairiness in ring spinning measured. false loop hairiness 146
hairiness in sized warp yarns. behavior during fabric formation. German research 7401
hairiness relative to fiber properties. tested with Digital ITQT apparatus 1719
hairiness. causes and reduction 6599
hairiness. Zellweger Uster Tester 3, test method 4665
hairiness 1720
intermingled. NPT R-2060 automatic needle pull tester 5462

ITMA [1987]. textile testing machinery. data gathering 5459
Ivchesmach's ChM-50 carder, tests on cotton sliver, yarns 4079
JIS L 1062 yarn distortion test in woven fabrics 2211
Joyce-Lebel 3CS computerized optical measurement device for yarn density 4668
Keisokki Classifault II computer based yarn fault classifying system 3824
KF versus Bevaloid-400 for acetate warp, tests on both sizes 4164
knitting forces on yarn obtained by transducer mounted on needle. from Oy Tech Center in Finland 7066
KSL (S. M. Kirov Institute) device for fiber orientation, straightening tests 4067
laboratory tests on the effectiveness of graded pickers, cotton yarn 4091
linear density testing for continuous filament glass yarns 3827
manmade, manmade/natural, natural fiber and yarn testing device, static charging 51
metal wrapped yarns studied from eight museum textile samples, electron microscopy and energy dispersive x-ray spectrometry 4978
microphotometer tests of short segments for evaluation of fiber arrangement of open end spun yarns 4956
model of damage caused by friction to cotton thread in various environments 4660
near-infrared determination of nylon carpet yarn heat setting method 7067
novelty yarns. Saurer-Allma ESP-SX spinner-twister 149
number, yarn. Fast Count System. Zweigle 6269
overview. accurate and objective testing by automatic multi-functional apparatus 8224
Oy Tech Center. yarn tension monitored electronically on weft knitting machines 6713
PET bristle used as a model for fatigue and wear in tire cord 8698
plain loops of rotor spun cotton yarns. geometry and dimensional properties 2682
polyacrylonitrile self-twist, strength, relation to nip length 7064
polyester, shrinkage increased in the drawing stage, decreased in the finishing stage 4896
polypropylene yarn embedded in cement matrix. maximum pull-out force values 7810
posture during interlacing. statistical analysis with microcomputer 4982
Puasson breakage prediction method on BD-200 rotor spinners, filament yarns 4113
quality. testing. filament. Zellweger Uster 3C/Automatic Digital Tester 3819
radial packing density of rotor and ring spun yarns 8703
reinforced and cotton sewing threads in protective clothing, resistance to harmful substances 172
residual twist of ring and rotor spun yarns. study of thirty-six yarns 3353
scouring effects of raw silk in composite spun silk yarns 1621
Sirospun yarns. wicking measurements from viscose series 5818
sizing. improved speed, air pressure, and size content resulted in better size coverage, tests 4998
Soviet photoelectric non-contact sensor for linear density measurement 4662
spinning mill yarn and fiber testing methods and planning for product quality and uniformity 3828
splices, factors influencing yarn strength 6584
staple yarn hairiness tester improved, more accurate 5463
static and dynamic frictional behavior of DREF, air jet, and ring spun yarn 5813
static and kinetic friction. measurement method 3047
strength and elongation. single and ply yarns. USTER tensile testing installations 1451
strength testers, CRE and CRT load characteristics 3051
stress-strain of polyester, nylon 6 multi-ply yarns. suitability for electrical uses 178
stretching properties after loop formation 2212
structure. calculating packing density, pore diameter, compression, other properties 3395
Superba Yarn Tester. automatic control device 5786
system, tensile strength measuring, from FAG-Hammelburg and Retech 6270
teasel napping, tests on factors affecting yarn hairiness 4964
tensile strength testing instrument with multiple cop change 8692
tensile strength testing of yarns under differing deformation rates 3052
tensile strength, microprocessor measurement 7068
tensile testing, cotton, formulas for rigidity modulus 179
tensiometers, mechanical and electronic. from Hans Schmidt 8695
testing device for staple yarns to determine optimum flexibility for processing to avoid breakage 4666
tests on warp yarn reliability during weaving, formulaic analysis 4210
textured, friction. surface alteration examined by electron microscopy 6271
thermoanalytical measurement of polyester filaments. structural characterization, prediction of dyeing behavior 8704
twist tenacity of multifilament yarns. effect of melding 5817
twist tester, D 312 from Zweigle 4147
twist. digital multifunctional tester. BTRA 8697
unevenness. correlation analysis with photoelectric sensor and Uster Tester GGP 1453
variance length curves used to measure unevenness 2529
viscose, manmade, variation in length allowable for rotor spinning 4943
weak places. effect on weavability 1721
wicking in ring spun vis-a-vis rotor spun yarns 4667
wool warp yarns, fatigue tests, effects of weaving. sizing, linear air density 4148
wool/polyester yarns. effects of Lavsan content on yarn uniformity, abrasion resistance and elasticity 180
wool/polyester, viscose/polyester, wool processing machinery, properties 4919
wrapping curve on torus surface 6272
Yarntester unit by Superba. objective testing of spun yarns. cost reduction 6610
Zweigle G 565 yarn hairiness measuring instrument and G 555 Staff-Tester 3825

YARNS (SEE ALSO OTHER HEADINGS, SUCH AS ABRASION, BLENDS, CORE YARNS, ELASTIC YARNS, FIBER-YARN-FABRIC RELATIONSHIPS, FRICTION, KNITTING, KNOTS AND KNOTTING, METALLIC YARNS, ROVING, SLIVER, SPINNING, SPLIT FIBERS/SLIT FILMS, TEXTURED YARNS, TWIST, UNIFORMITY, ZERO TWIST YARNS, AND UNDER SUBJECT HEADINGS OF SPECIFIC FABRICS, SUCH AS CARPETS)
acrylic/viscose rotor spun yarns tested for twist effects on flexural rigidity and elastic recovery 967
acrylic/viscose Siro spun yarns. effects of staple length, fiber denier, and strand spacing on properties 6600
air jet looms. yarn characteristics and machine design 7417
air jet spun yarn structure correlated to tensile properties 7376
air jet spun. Heberlein HFP. blending of elastomeric and staple yarns 5741
air jet, friction, and open end rotor technologies 5779
ASTM [1988] specifications and standards listings 8931
breakage and defects reduced on shuttleless, rapier, and air jet looms. data on cotton weaving 224
buyers' guide for yarn and fiber [1988-1989]. product and supplier listings 6617
carbon fiber yarns from Schappe. protective fabric applications 2544
colored effects on yarn in hank and packages. SWA Italia SMT 2002 and the Spraychromatic 081 machines 6891
core spun yarns affected by sheath fiber denier, twist, dyeing treatment 976
cotton Melana yarn dyeing on devices with perforated bobbins 1920
cotton, cotton system waste in open end spun yarns, seven yarn evaluations 4100

cotton, Indian. DREF-3 friction spinning 6587
defects in structural organization in viscose 8225
directory of yarns used by United Kingdom knitting sector 6618
double yarns. effects of single yarn properties on double yarns 6601
Du Pont expands Lycra production capacity 6615
entwining unit. entwines staple fiber yarns with filament yarns using compressed air unit 161
fabrics composed of open end spun yarns, effects on fabric quality, properties 4360
false twist texturing. latest developments. process stability and management 6607
fancy yarns from reusable textile materials 1725
fancy yarns. study of manufacturing processes, technology and application 8204
fiber blending irregularities. effects on quality of resulting blended yarns 5729
fiber producer at [1988] Yarn Fair. prominent trends, products 7398
filament, spun yarn-like. wear comfort properties 4151
filament. Pertex 6 from fine filament Nylsuisse yarns. protective clothing fabric 2702
fine yarns from ring and rotor spinning compared 4928
finishing, soil release. effect of geometry 670
formula to determine amounts of various fibers in a blend yarn, example 4658
friction spinning. fine yarn. performance factors 139
Gemmil & Dunsmore Paraspin fancy yarn wrap spinning machine 3357
glass fiber continuous filament yarns. Owens-Corning 4023
Grandrelle yarns. merchandise development 1722
Grilon yarns from EMS-Grilon. heat degradable yarns used for fusible bonding and melt adhesive purposes 4979
hairiness of open end and ring spun yarns. effects of hank of sliver, twist multiplier, and chemical treatments 3398
hard twist yarns. forces in heat setting and winding 7381
high performance yarns for protective clothing industry 7399
high tenacity. Mayer's ZM(Z)G warping system 5852
hosiery. guide to yarns and fibers. companies, products, end uses 2534
interlacing with air jets 8198
intermingling, air, of continuous filament yarn by Heberlein and LIBA 5947
introductory course to textiles and textile technology 7258
IPE twist intensifier on BD-200 series rotor spinners, yarn properties 4126
Joyce-Lebel 3CS computerized optical measurement device for yarn density 4688
knit-de-knit yarns. features. crepe effect on knit fabrics 2545
lightweight sweater yarns displayed at [1988] Yarn Fair 7400
measurement. Turbo Pascal program for count conversion 2290
men's hosiery and underwear fibers and yarns from various manufacturers 2535
mercerizing machines. hank and warp mercerizing 6839
Merino, Chokla, Rambouillet crossed with Chokla yarns dyed under different pH conditions. effects on stress-strain properties 975
microfiber. Tactel 24 Carat from ICI Fibres 896
Modular hank yarn drying range from Galvanin 5319
Mossley Incorporated, novelty yarn producer. expansion program, quick response philosophy 4149
New York Yarn Fair [1988] held with SOURCEAmerica for knitwear manufacturers. new products 6616
novelty yarns in woven fabrics for home furnishings industry. executives describe market trends 977
novelty yarns. interest in wool and wool blends. [1988] outlook. expansion into home furnishings 2546
novelty. hollow spindle machine with drafting mechanisms 3349
novelty. Saurer-Allma's ESP spin twister 3363
open end spun yarns, general characteristics. Polish yarn quality, effects on weaving 4152
outerwear yarns for [1989/1990 fall/winter] season. joining of natural fiber esthetics and synthetic yarn qualities 8226
PALF yarn. bleaching effects on tensile behavior and processing 4150
Pitti Filati yarn fair, spring/summer, reasons behind poor attendance and sales. product trends 1723
ply yarn with Hamel 2000 combi-twisting system 5795
polyamide. Grilon EMS separation yarns. features, applications, properties 181
polyester (Lavsan) blended with rust-resistant steel fibers for filter fabrics 111
polyester, viscose, viscose/polyester filament yarns, twisting, uses 182
polyester/viscose blend yarns evaluated 6611
polypropylene filament yarns, preoriented. spinning 6554
polypropylene multifilament yarns for recreational clothing 4980
polyvinyl chloride/wool staple, knitting, production 4981
posture during interlacing. statistical analysis with microcomputer 4982
processing, One Yarn Spirovap machine, type WP/MU from Superba. new Modular steaming machines 3383
product range from Wiscassett Mills 8754
rapier. Dornier loom and varieties. problems with yarn 4199
renewed interest in natural and manmade fiber at Yarn Fair [1988]. Orlon blends, acrylics, hair yarns popular 8206
ring spun and polyester wrapped twistless yarn fabrics with durable press finish. compared 7392
roller printing 5289
rotor spinning machine from W. Schlafhorst. Autocoro 3367
rotor spinning of cotton/polyester (Lavsan) yarns, properties 147
rugs, Navajo. dyeing with plants 1011
Saint Andre International implements Quick Response. cut creation time for fashion yarns from five weeks to five days 924
Saint Andre Spinning. yarns produced. implementation of Quick Response 2543
single jersey knit fabrics. ring versus open end spun 2221
Sirospun yarns. wicking measurements from viscose series 5818
solution or producer dyed yarns for carpet pile. polyamide bulked continuous filament yarn 2780
SourceAmerica and Yarn Fair [1988]. trade show for knit apparel and textile industry 7397
synthetic yarn deformation process. statistical modeling 3822
synthetic, high tenacity. thread linked double wall fabric. Girmes 1126
Texcellana. cotton/wool yarn from Texas 13
textured, production alternatives to false twist 1713
texturing machinery and products. ITMA [1991] prospective developments 7387
texturing process parameters analyzed 5808
Thibeau B34PP carder for polyester yarn produced from sliver 118
thread and yarn used in knitwear industry [1987]. results synthesized by the Textile Matrix 7862
twist. electrostatic spinning, tube twister efficiency 138
twisted yarns, mechanics. equations 978
twister, balloonless. Hamel 2000. creates new yarns without an assembly operation 3375
twisting machinery and processes. developments. state-of-the-art. future trends 957
two filament twisted yarn. yarn tension as function of extension 2547
two ply. Plyfil spin assembly winders from Suessen 5798
types, spun, core spun, textured among others, and performance in apparel and household and industrial textiles 1726
United Kingdom Buyer's Guide. yarns, tops, raw materials, specialty fibers 3181
United Kingdom yarn producers 1697
United States yarn producers contemplate export market. other activities and production strategies 2498
United States [1987] textile and apparel trade deficit 2367
various types. economical advantages to using new varieties of yarns. reusable materials 1727
VEB Spinner Factory's 2112/K air jet driven ring spinner, abilities, yarns 4118
warp yarn defects, tearing during weaving, causes, prevention

4983
waste. left on carriers. Martin Worldwide's bobbin stripper 3344
wool fabric wastes during rotor spinning, re-use and processing methods and machinery 104
working with hollow spindle effect plied yarns in knit outerwear 3399
wrapping curve on torus surface and tension variation during tangential sliding 7382
Yutaka Anzai string for racquets. stringed instruments 1724

YELLOWING, SEE COLOR MEASUREMENT, DISCOLORATION, PHOTOCHEMICAL DEGRADATION, STAINS, WOOL.

ZEFKROME IS AN ACRYLIC FIBER.

ZERO TWIST YARNS
polyester filament yarn. importance of careful sizing 7405

ZETA POTENTIAL (SEE ALSO OTHER HEADINGS, SUCH AS STATIC ELECTRICITY)
metalized Nitron fibers. heat treatment and humidity effects on electrical conductivity 7360